

**REPORT TO THE GOVERNOR,  
1996-97 AND 1997-98**

**STATE OF HAWAII DEPARTMENT OF LAND  
AND NATURAL RESOURCES**





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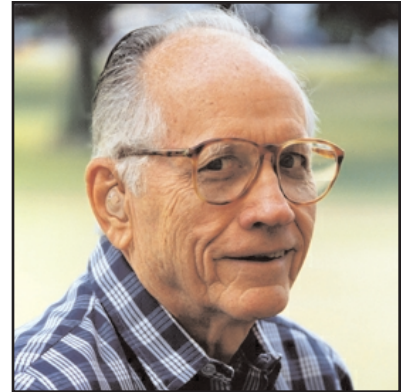
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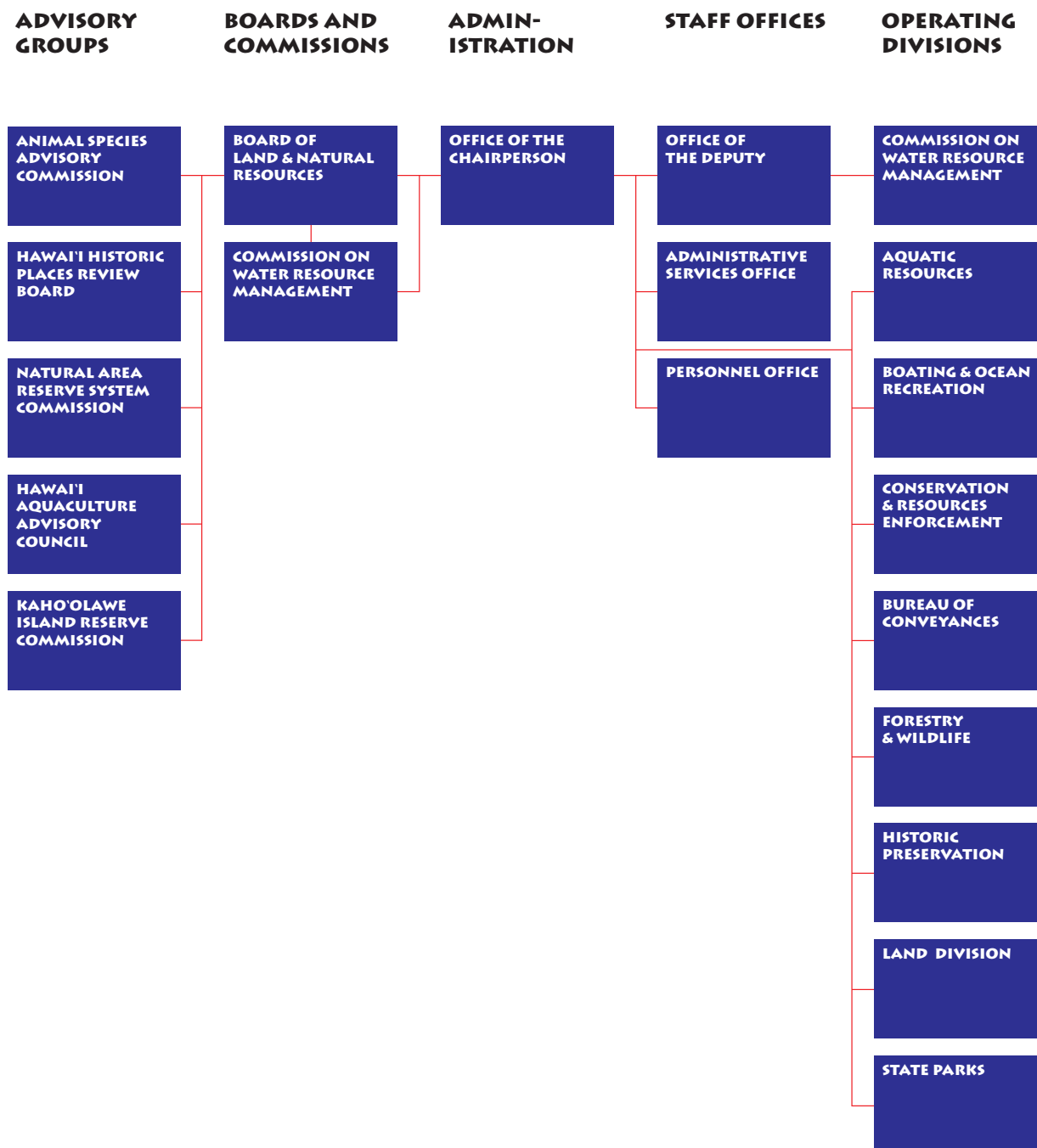
RAE M. LOUI



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## DEPARTMENTAL ORGANIZATIONAL CHART





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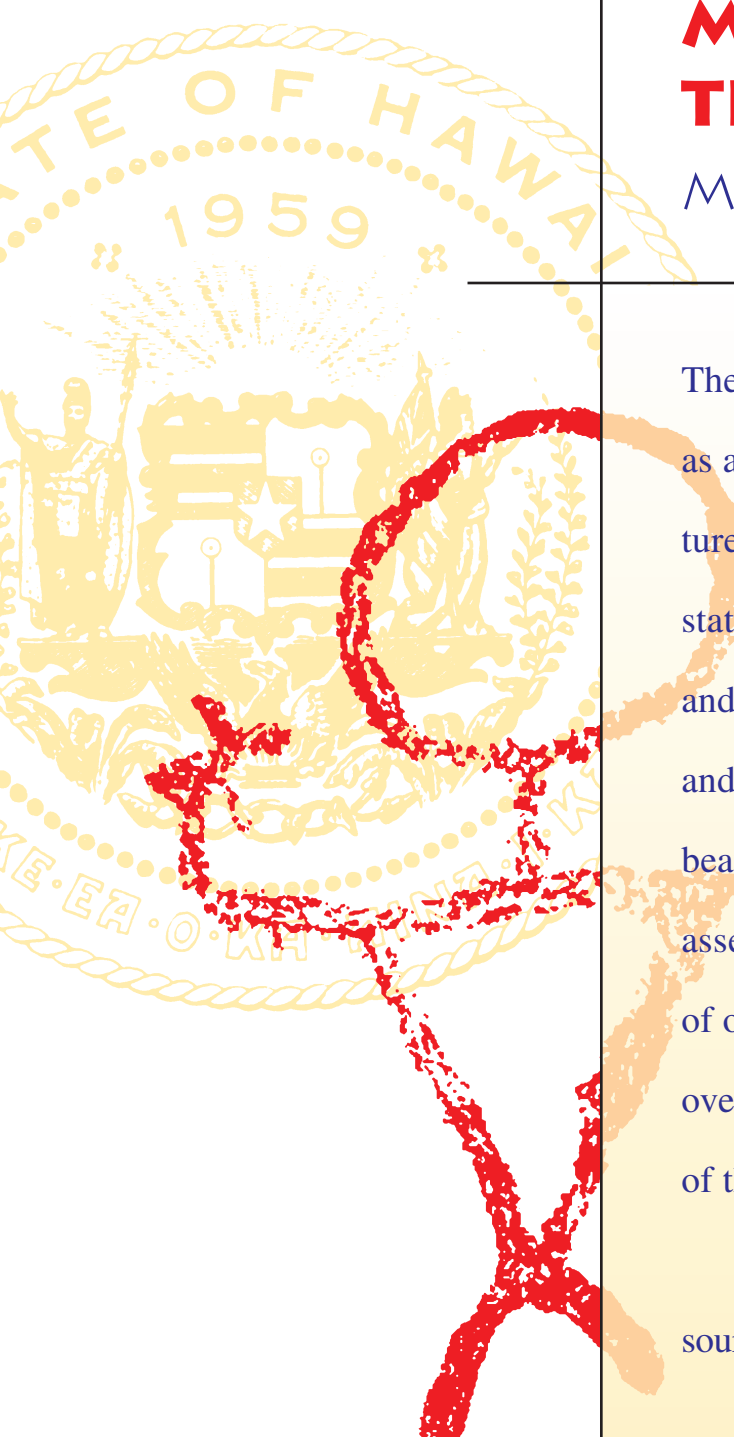
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# CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"

MICHAEL WILSON

The seal of the State of Hawaii is partially visible on the left side of the page. It features a central shield with a star, a sunburst, and a figure. The shield is surrounded by a circular border containing the text "STATE OF HAWAII" and "1959". A red lei is draped across the seal, and an orange lei is also visible. The background of the page is a light yellow gradient.

The world has come to recognize Hawai'i as a paradise on Earth. Home to rare creatures and plants found nowhere else, our state is blessed with breathtaking features and vistas which trigger the imagination and inspire us to greatness. But for all the beauty and grandeur, Hawai'i's greatest assets are their own undoing. The bounty of our islands seems unending, inviting overuse and a decline in the overall health of the environment.

The Department of Land and Natural Resources plays a crucial role in the preservation

**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"**

of Hawai'i's natural and cultural resources from the mountain tops out to sea. It is our challenge as stewards of Hawai'i's natural heritage to stop the loss of our beaches and shorelines, reverse declining tropical reef fish populations, and control resource degradation from increasing human recreational and shore uses.

This remote land mass is home to spectacular coral reef systems, dramatic mountains and forests as well as a great variety of plants and animals found nowhere else on Earth. In fact, Hawai'i has more endangered species than any other state in the nation.

For that reason, the concept of "Sustainability — managing Hawai'i's natural and cultural resources responsibly today, for the benefit of future generations" is central to our decision-making process and our management ideals. DLNR is engaged in numerous efforts to maintain or improve the health of our resources, while gaining better understanding of their complexity.

As we view the changing face of Hawai'i, and recognize the long-term impacts of increasing pressure on our resources, eco-

nomie growth can no longer be considered without conscious attention to environmental protection. Now, more than ever before, fiscal austerity is requiring DLNR to become more creative about balancing uses and protection. To achieve "Sustainability" we are employing a more comprehensive, community-based approach to management, and maximizing our research opportunities through cooperative projects we share with other agencies, such as the University of Hawai'i.

During fiscal years 1996-97 and 1997-98, our focus was on effective "implementation" of sustainability through building public and private partnerships to protect and replenish our natural resources.

Following are some of the programs and projects we accomplished in the biennium, with the support of Governor Cayetano and the State Legislature:

**FY 1996-97:****"OCEAN STATE" INITIATIVE**

The alarming state of Hawai'i's ocean resources, key fisheries on the brink of collapse, galvanized

the Legislature, with strong support from the Governor through his Ocean State Initiative — to approve additional funding in the biennium for the creation of six new aquatic resources staff positions. During its 1997 session, the Legislature boosted the state aquatics budget by approximately \$1.72 million. The Ocean Initiative is being implemented through a "Fish for the Future" campaign that includes projects such as a bottomfish recovery program, increasing the size of existing artificial reef habitats, and expanding the successful mullet stock enhancement program to all counties. We are also simplifying the commercial fish catch report system as we improve the database; and strengthening our commitment to the conservation of reef fish populations with improved coral reef monitoring and management. Lastly, we are working to define stream flows required by native freshwater species that are important in traditional Hawaiian culture. The Ocean State Initiative also strengthened the staff of the Division of Conservation and Resources Enforcement which was able to add 14 new officers statewide in April 1998.



**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"****COMMUNITY-BASED  
RESOURCE MANAGEMENT**

One way in which we moved to build public and private partnerships to address the future of natural resources in Hawai'i was by convening annual "Sustainability Summits," which brought together various stakeholders from the public, other state agencies, private, commercial, and special interests. We sought their input and worked to brainstorm new ideas for managing resources and building public support and cooperation on a variety of issues facing DLNR.

DLNR has strived to involve resource users such as fishermen, boaters, thrillcraft users and hunters in maintaining our precious natural resources. As an example, during the biennium, DLNR established a Bottom Fishermen's Advisory Panel, comprised of fishermen and fishery experts. Panel members worked closely with the Division of Aquatic Resources staff for more than a year to develop draft rules on gear and take size, and to set aside areas which will be off-limits to bottomfishing. The purpose of the bottomfish rules is to allow fishing to continue, yet allow juvenile populations of this

critically reduced fishery to replenish themselves to maturity.

Community organizations who want to get involved in maintaining our state parks, harbors, and cultural sites may adopt a facility or site by signing a formal adoption or curatorship agreement with DLNR. More than 15 state small boat harbors and boat launch ramps were adopted by community groups under the Adopt-a-Harbor program. The Division of State Parks has benefited from the community's curatorship of 7 historic properties in state parks on O'ahu, Maui, Kaua'i and Hawai'i, and 3 Adopt-a-Park agreements, 3 docent programs and 5 management agreements with non-profit organizations which operate programs in parks, or assist in the stewardship of park resources. Through the State Historic Preservation Division, other sites cared for by community organizations include, Ho'ona (Hawai'i), Pahukini Heiau (O'ahu), Greenbank (Kohala, Hawai'i) and Hanapēpē Salt Ponds (Kaua'i).

Island communities also joined with DLNR as stewards of natural resources through participation in cleanups of state parks, such as at Kekaha Kai State Park, Hawai'i; Nā Pali Coast State Park, Kaua'i; and

*Economic growth can no longer be considered without conscious attention to environmental protection.*

**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"**

Ka'ena Point Natural Area Reserve, O'ahu. And at each of these three areas, DLNR established on-site "park ambassadors" to educate park visitors on how to care for the special beauty of the area. This active involvement by community groups in the caring for our resources educates them about the extent of our management responsibilities, and results in a facility being better maintained for all public users.

**PUBLIC OUTREACH**

DLNR extended its outreach to the community by creating an Office of Volunteer and Community Services to educate the public and to expose young people to careers in this field. Individuals or groups wanting to help DLNR protect state resources were able to call the Community Services Office to find out about volunteer opportunities in DLNR, or with our many partners. The Volunteer and Community Services Office also coordinated DLNR's participation in special events and community fairs with displays and personnel.

A new Visitor Education Center and One-Stop Permit Center were created together in one location at our Honolulu office, to offer educa-

tional displays about our "Sustainability" philosophy, the uniqueness of Hawai'i's natural heritage, and ways the public can help protect Hawai'i's resources. The Visitor Education Center formed part of a larger departmental vision to inform and engage Hawai'i's citizens in becoming stewards of our island state. Numerous school groups have toured the "Only in Hawai'i" exhibit, where they learned about the challenges facing our islands — such as the threat of alien plant, insect and animal species, the extinction of native flora and fauna, and the increasing human impact and use of Hawai'i's limited resources.

The One-Stop Permit Counter increased efficiency of DLNR services to the public by making available the most popular permits — for fishing, hunting, camping, and gathering and collecting forest products — in one convenient location. A mini-DLNR store is open at the center, where merchandise can be purchased to support natural resource management programs.

The Community Services Office was successful in receiving a federal grant which funded a staff member to provide school tours of the Visitor Education Center, assist with

preparation of displays, and provide organizational support for community cleanups of marine debris. The office also obtained a federal grant to bring to Hawai'i the first national AmeriCorps team of young adults for six weeks' training in natural resource management.

To promote public awareness that alien plants, animals and insects entering the islands by air and sea pose "the single greatest threat" to Hawai'i's economy, environment, health and lifestyle, DLNR, with The Nature Conservancy Hawai'i, initiated a "Silent Invasion" public awareness campaign on KITV-4 in October 1996. The campaign began with the publication of a report authored by the Coordinating Group on Alien Species (CGAPS), a partnership of 14 state, federal and private interests in Hawai'i. The report lists specific steps Hawai'i's residents and visitors can take to help prevent and contain the problem. Hawai'i Senators Daniel K. Inouye and Daniel K. Akaka announced the appropriation of federal funds for Brown Tree Snake control, increased U.S. Forest Service staff for alien species research and control of Miconia and other noxious weeds.



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**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"**

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**YOUTH EDUCATION**

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For the past four years, DLNR's Volunteer and Community Services Office has organized a summer program for high school and college students to work alongside our various resource managers in the field. This 8-week service learning program, called the Hawai'i Summer Youth Conservation Corps, has provided education, team-building, support and training for 61 students in hands-on resource conservation projects. This intense and innovative program seeks to instill in young people an understanding of, and an appreciation for natural resource management challenges.

**COASTAL LANDS PROGRAM**

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Wide, healthy beaches are critical to the health of Hawai'i's tourism-based economy, and to spare coastal development from the effects of storm surge and coastal erosion. To protect our shorelines, DLNR in January 1996 began to develop a comprehensive coastal lands management plan with the University of Hawai'i School of Ocean and Earth Science and Technology. In FY 1997, the Board of Land and Natural Resources

approved the Coastal Erosion Management Plan (COEMAP), an inter-agency approach to solving problems of beach loss, improving agency cooperation and reducing red tape, and building support for legislative changes. DLNR is developing a Coastal Lands Program to identify coastal hazard areas, fund and conduct needed research, support increased enforcement, and identify sites for beach nourishment and/or alternative shoreline erosion mitigation projects.

**FY 1997-98****HOT SPOTS**

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To focus our community-based management efforts, we identified 25 "hot spots," natural resource areas throughout the state, for special priority management attention. These areas have suffered due to resource degradation, user conflicts, problems with public welfare and potential illegal activity. DLNR divisions made the most of limited funding and personnel, and worked with communities to arrest the misuse and decline of these treasured locations, and place them on the road to recovery.

During our second Sustainability

Summit, we looked at the top three priority management issues for selected hotspots and began to design action plans for them. Action plans that were developed for all hotspots represent our collective vision for the future of these resources. In order to raise public awareness of the problems, and potential solutions to hotspot management, we compiled the plans in a Sustainability Hotspots notebook that was distributed to each member of the 1998 State Legislature, and also posted on our web site.

**MARINE PROTECTION**

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DLNR marked the 30th anniversary of the establishment of the 101-acre Hanauma Bay as the state's first Marine Life Conservation District. Since 1967, nine other areas have received the special designation as protected areas for marine life to grow and reproduce. MLCs have been proven to be effective management tools for sustaining nearshore fish populations, providing safe habitat for populations of marine species to build and be protected from over-fishing.

Hawai'i is home to the most endangered marine mammal in the U.S. — the Hawaiian monk seal. It

**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"**

is also the winter home of the humpback whale and 10-15 other species of marine mammals who spend at least part of their lives in Hawai'i waters. To better understand, manage and protect Hawai'i's marine mammals, DLNR and the University of Hawai'i Pacific Biomedical Research Center established a collaborative program to help DLNR evaluate potential effects from commercial and recreational activities on the mammals, and to make informed decisions. A Marine Protected Mammal Specialist was hired to review DLNR's research permit process for marine mammals, and to teach the public about Hawai'i's marine mammals.

During the 1998 International Year of the Ocean, DLNR was the lead agency to coordinate public awareness events and information with other agencies and organizations about the importance of the ocean here in Hawai'i and globally. DLNR, in conjunction with the City and County of Honolulu, University of Hawai'i Sea Grant College Program, U.S. Coast Guard, National Marine Fisheries Service, and Hawaiian Humpback Whales National Marine Sanctuary, developed a quarterly calendar of ocean-related events,

and a fact-filled Year of the Ocean Guide to Hawai'i's Ocean and Marine Resources and Activities, which was distributed to teachers and libraries locally.

**NATIVE STEWARDSHIP  
TRAINING**

Hui Aloha 'Āina, an 8-week pilot program, made its debut as a program designed to provide entry-level training to six young Hawaiians in both traditional Hawaiian methods of "mālama 'āina" (caring for the land), and in modern resource and cultural site management. While funding restrictions prevented Hui Aloha 'Āina from fulfilling its originally intended 9-month term, it may serve as a springboard to inspire some of the participants to pursue careers and higher degrees appropriate to this career field. The long-term goal of this program was to build a pool of trained Hawaiians to participate in land stewardship, and to address the under-representation of Native Hawaiians in the field of resource management.

The Hui Aloha 'Āina project allowed six Native Hawaiians to gain valuable work experience in resource management, through

activities such as clearing trails, restoring lo'i, maintaining parks, and planting trees on Kaho'olawe. For agencies such as DLNR, this can be a way to provide career training in our home communities, and to integrate Native Hawaiian resource management values of the community with scientific and resource management perspectives.

**ON-LINE ACCESS**

Public awareness is one of our key strategies to preserving our treasured resources. DLNR's web page (<http://www.state.hi.us/dlnr/Welcome.html>) provides worldwide accessibility to current online information about departmental programs, services and accomplishments, and key resource management issues. During the biennium, an inter-divisional DLNR staff team worked to expand and greatly improve DLNR's web page with more extensive and useful information, scenic images of Hawai'i and more interactive features, including a departmental e-mail address. Administrative rules are being placed on the site, which increases public accessibility and reduces cost to the public, since the rules can be downloaded for free.

**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"****HISTORY IN THE MAKING**

In December 1997 the State Commission on Water Resources Management concluded several years of a contested case hearing to render a decision on allocation of water from the Waiāhole ditch in Windward O'ahu for agricultural purposes. In its final decision and order, the commission established new interim instream flow standards and supplemental flows to protect Windward streams, and authorized sufficient water to meet the present and future water needs of Leeward diversified agriculture. Of the approximately 27 million gallons of water per day that has historically flowed to Central O'ahu to irrigate sugar, 14.03 mgd will be immediately available for diversified agriculture and other uses in Leeward O'ahu. Windward streams will benefit from an additional 6 mgd that will effectively double the existing base flow in Waiāhole Stream and greatly increase the base flow in Waianu Stream.

In the same month, the Kaho'olawe Island Reserve Commission began a long-term, state-of-the-art environmental restoration project to restore vegetation on the badly eroded and denuded former

target island. Actual reforestation and replanting work began the following spring, following removal of unexploded ordnance by experts.

As part of Governor Cayetano's vision for a "string of pearls" of shoreline parks around O'ahu, the State is proceeding to purchase the 304-acre Ka Iwi shoreline from Bishop Estate through condemnation. Acquisition of Ka Iwi is a necessary and important step to preserve the scenic vista and wilderness area of Queen's Beach for the people of Hawai'i. In September 1998 the State released \$1.8 million to acquire and preserve the Ka Iwi scenic shoreline, the last remaining open coastal wilderness area in East Honolulu.

Hawai'i has a rich tradition in forest management. This has resulted in the 11th largest state-owned forest reserve system in the United States in addition to substantial areas of privately-owned forests. DLNR is developing timber management plans in consultation with forest industry and community organizations through Nā Hoa Mahi'ai: Hawai'i Community Forestry Initiative. We look forward to developing a forest industry that is compatible with our communities. An emerging forest industry

*"If the Department of Land and Natural Resources does its job...it will work with the community to design a future that foresees change and maintains the essence of Hawai'i."*

**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"**

will help diversify Hawai'i's economy, provide quality jobs for Hawai'i's people, put back into use lands that were previously farmed for sugar, and supply the local industry with a new wood source.

**CONCLUSION: THE FUTURE OF "EARTH'S BEST"**

Any person who has the good fortune to be the Chairperson of Hawai'i's Department of Land and Natural Resources enjoys a kind of transformation. It is reminiscent of the awareness related by astronauts who step into space for the first time. The magnificence of our planet and its vulnerability become apparent.

It is easy to understand why Hawai'i symbolizes humankind's idea of natural beauty. The healing rhythm of sun, pure fresh water, pure warm skies, pure ocean, pure forested mountains, white beaches, flowing streams, birds and dazzling marine life is felt by people lucky enough to step on Hawai'i's land or feel its water. The mixture of tropical life and beauty is what makes Hawai'i "Earth's Best" place in the minds of hundreds of millions of people.

It is natural to imagine that we would create a management system to maintain the quality of the treas-

ure we inherited. Two of the most obvious components of an acceptable system would be application of the most current knowledge about our ecosystems, and relevant study of those systems to know how they are changing. If the Department of Land and Natural Resources does the job required by the Constitution and laws of the State, it will work with the community to design a future that foresees change and maintains the essence of Hawai'i.

Right now, a critical lack of adequate funding support makes it difficult for this Department to ensure a sustainable future for Hawai'i's natural environment that is comparable to, or better than, the present environment. We are truly an "ocean state," yet our budget for managing water resources (stream and ocean) is less than that of landlocked Wyoming. Lack of funding prevents development and implementation of programs for community-based management of fishing, hunting, diving and other resource-based industries. In order to ensure a sustainable future for Hawai'i's natural resources, we need to train new resource management leaders from Hawai'i's youth, something we could be doing in partnership with the Department of Education.

Though funding has been tight during the last four years, many ideas for sustaining some key natural resources for the state were developed into programs. Let us hope that these new programs are coming in time to turn the current tide of resources decline into one of sustainability. The warning signs have been there for decades. At Pearl Harbor posted notices now warn the public not to eat the fish and shellfish they may catch there, due to years of pesticide and chemical contamination from onshore activities. Overfishing has been identified as a major management challenge facing our marine ecosystem. More research and additional steps to limit further decline of affected fish populations are needed. Erosion of beaches, a serious statewide problem, continues even as DLNR and state, federal and county partners begin to implement a new plan to stem erosion and replenish beaches. Invasive non-native weeds such as Miconia and banana poka, continue to overtake native forests despite DLNR's efforts to control their spread.

As with our ocean resources, our freshwater resources are also in need of close management attention to prevent further degradation.



**CHAIRMAN'S MESSAGE: "HAWAII, THE OCEAN STATE"**

DLNR has an active monitoring program for native stream ecosystems and animals to help us gain baseline knowledge to better manage and conserve these resources. We are now monitoring the effects of streamflow restored to Waiāhole Stream on O'ahu. At Salt Lake, at Mānoa and other communities, we are doing more with local schools to teach students about stream ecosystems and how to keep them healthy.

However, present funding will not be sufficient to adequately plan for management of state freshwater resources. Available funding has been allocated to the preparation of a Statewide Framework for updating the Hawai'i Water Plan, and for updating specific components of the plan. Future funding is needed to update the Water Quality Plan, to complete the Water Resources Protection Plan update, and to prepare an Agricultural Water Use and Development Plan. Comprehensive water resource planning as mandated under the State Water Code (which also includes monitoring and data collection) is considered essential to effective management and protection of our state's ground and surface water resources.

Fortunately, there are signs that Hawai'i's management of its natu-

rally occurring resources is improving. The Governor, the Legislature and non-profit groups supported the new programs described in this report. The idea of community-based input for stewardship of Hawai'i's natural resources is now accepted, and is being used to a growing extent as more people become involved.

Additional support for taking care of Hawai'i, and the planet, is evolving. The international constituency concerned about the loss of unique forest, stream and ocean ecosystems is beginning to help. The link between a global tourist economy and our naturally occurring forest and marine animals is becoming more apparent as environmental degradation proceeds outside Hawai'i. These trends suggest Hawai'i will eventually have a management system that sustains key natural resources for future generations. DLNR is committed to reaching that goal as soon as possible.



## DLNR'S MISSION STATEMENT

### HAWAII STATE CONSTITUTION

#### ARTICLE XI — SECTIONS 1 AND 7

### CONSERVATION AND

#### DEVELOPMENT OF RESOURCES

**SECTION 1.** For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawai'i's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

All public natural resources are held in trust by the State for the benefit of the people.

**SECTION 7.** The State has an obligation to protect, control and regulate the use of Hawai'i's water resources for the benefit of its people.

The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawai'i's water resources. (Add. Constitutional Convention 1978 and election November 7, 1978)

## **DIVISION OF AQUATIC RESOURCES**

Surrounded by water, Hawai‘i is truly an “Ocean State.” As fishermen, divers and other ocean users know, Hawai‘i’s aquatic resources are central to our state’s culture and economy. Our marine and freshwater resources impact nearly every aspect of life in Hawai‘i, from our drinking water which trickles through our majestic mountains, to the ocean which provides us with food and recreation activities that attract both residents and visitors from around the world. DLNR’s goal of sustainability is aimed at preserving the quality of life for residents and keeping

**DIVISION OF AQUATIC RESOURCES**

Hawai'i a favored tourist destination by protecting what makes Hawai'i unique — our island environment.

Hawai'i's inter-island waters are one of the world's most important humpback whale habitats and the only place in the U.S. where humpbacks reproduce. Scientists estimate that two-thirds of the North Pacific humpback whale population migrate to Hawai'i each winter to breed, calve and nurse in the warm Hawaiian waters. For this reason, Congress in 1992 designated the Hawaiian Islands Humpback Whale National Marine Sanctuary to protect the humpback whale and its Hawaiian habitat.

DLNR and the National Oceanic and Atmospheric Administration (NOAA) are co-managers for the sanctuary. On June 5, 1997, Governor Cayetano approved the sanctuary's management plan. Together the partners have begun to implement a cooperative program for marine education concerning humpback whales. Our aim is to gain public, interagency and international cooperation in the protection of whales and their habitat.

To protect Hawai'i's ocean and stream ecosystems, the Division of Aquatic Resources (DAR) is charged with managing the fourth longest

coastline in the U.S., that consists of 410,000 acres of coral reef, 565 million acres of ocean and 376 perennial streams. Yet its aquatics budget has dropped from 47th to 48th in the country during this biennium. As a result, DLNR faces an even more significant challenge to protect and enhance the sustainability of these resources, and to reverse the declining environmental and species survival trends of the past several decades.

The Division of Aquatic Resources manages the state's marine and freshwater biological resources through programs in commercial fisheries and aquaculture, aquatic resources protection, recreational fisheries, and enhancement and education. Its major program areas include projects to maximize Hawai'i's commercial fisheries and aquaculture productivity, protect native aquatic species and their habitats, and provide facilities and opportunities for recreational fishing.

Aquatic Resources faces many challenges as it fights to protect Hawai'i's ocean and stream resources. The value the ocean brings to our economy, health and quality of life makes it critical that we ensure the sustainability of the

state's aquatic resources. The ocean alone brings in over \$3 billion each year in gross revenue to the state's economy, through commercial fishing, ocean recreation, shipping, aquaculture, and research and development. Ocean recreation is the fastest growing segment of Hawai'i's tourism industry.

Faced with the pressure of these industries and competing users, the responsibility for managing these aquatic resources is an urgent priority for DLNR. People come to Hawai'i to view and swim in our ocean, to enjoy fishing, diving and boating, and to lie upon our beaches. Yet the ocean features which attract tourists and sustain the life of our local residents are at risk. Our nearshore fisheries are in serious decline, and this trend has been observed for a very long time. Close to one-fourth of our reef species are endemic — found nowhere else in the world. Our coral reefs comprise roughly 80% of the total coral reef area under U.S. jurisdiction. Coral habitats and the reef fish they sustain have been heavily impacted by development, pollution and overfishing. We are at a critical turning point in Hawai'i's history with regard to taking care of our ocean resources.



## DIVISION OF AQUATIC RESOURCES

To address these resource management concerns, Governor Cayetano supported passage of his Ocean State Initiative in the 1997 Legislature. This support brought an additional \$1.72 million to the state's aquatic resources funding to hire six new staff in FY 1998 and FY 1999. In addition DLNR received an additional \$1.67 million in the biennium to hire 14 new enforcement officers for the Division of Conservation and Resources Enforcement. As a result, efforts have been expanded in restoration of our nearshore fisheries, protection of coral reef habitats, understanding of the vital relationship between stream flows and the ocean environment, better management of our commercial fisheries, and increased enforcement capacity.

We still have a long way to go. Per capita spending for fisheries management in Hawai'i remains at very low levels compared to other states; for example, it is six times greater in Wyoming, seven times greater in Idaho, and 52 times greater in Alaska. Nevertheless, progress is being made. The 1997 budget increase has enabled collection of the types of data we need in order to make sound and timely decisions about our fisheries

resources. As a clearer picture of what's happening with our marine resources emerges, we will be able to make management proposals that have the best chance of success.

### HIGHLIGHTS

Implementation of the Governor's Ocean State Initiative has allowed DLNR to add badly needed staff expertise on coral reefs, reef fishes, and planning. Aquatic Resources will be able to focus more attention on coral reefs, which are at risk from a number of locally manageable hazards, such as sediment loading and pollution, and overfishing. There is also increased impact from visitor activities which can lead to damage caused by snorkelers, divers, and boat anchors. In addition, coral bleaching seems to be increasing here and globally, perhaps as a result of climate changes such as El Niño or global warming. The division needs to be able to assess the impact of these factors if effective corrective measures are to be applied.

For this reason, the Division of Aquatic Resources co-sponsored and coordinated an international coral reef monitoring workshop in Hawai'i in June 1998. The workshop's purpose was to set direction and

establish a consensus on a coral reef monitoring program for inclusion in a management plan for Hawai'i's reefs. The monitoring workshop included suitable methods for measuring requisite parameters, strategies for use of local volunteers for data collection and community education, prioritization of research needs related to monitoring, establishment of a data base management system for Hawai'i's reefs and review of the workshop results to ensure compatibility with international coral reef monitoring activities.

A new approach to fisheries management in Hawai'i was exemplified by the adoption of new rules for bottomfish management and population restoration through the establishment of closed fishing areas encompassing about 20% of known bottomfish grounds. Development of the bottomfishing rules was done in concert with representatives from the fishing community and represented a major shift by DLNR towards community involvement in management. A strong parallel research program was initiated to increase the knowledge base for better management and to assess the effectiveness of the regulations. The research has already led to important discoveries



## DIVISION OF AQUATIC RESOURCES

about the life histories of the two commercially important species, onaga and ehu, that have declined most severely. Using innovative technology, such as manned deep-water submersibles and remotely operated vehicles, scientists have begun to better understand both the habitat and assess stocks of these important fisheries resources.

Also during the biennium, the division took steps to form a community-based task force in West Hawai'i to improve reef fish abundance and reduce serious conflicts between reef fish collectors, dive tour operators and other resource users.

More attention is being paid today to recreational fishing development and opportunities. For example, the successful mullet stock enhancement project in Hilo led to new rules, proposed by fishermen, which expand the boundaries of the Waiākea Public Fishing Area, prohibit the take of pua (small juvenile mullet), and limit adult fish and crab catches. On O'ahu, the alien water hyacinth which rapidly overgrew the Wahiawā Public Fishing Area in 1995-96 was almost eradicated with considerable staff and community effort. Two organized recreational fishing groups that focus on the Wahiawā Public Fishing Area

proposed an unprecedented catch-and-release regulation for restoring the two primary game fish populations, tucunare and largemouth bass, that had been decimated by certain illegally introduced alien fishes. The alien fish preyed on the young bass and tucunare, which could not then repopulate to sustainable levels in the face of fishing pressure. These rules have been implemented, and their effectiveness will be monitored.

### *The following are program descriptions and accomplishments for FYs 1996-97 and 1997-98:*

## COMMERCIAL FISHERY AND AQUACULTURE PROGRAM

### PROGRAM DESCRIPTION.

This program supports commercial fisheries through analysis of catch patterns and development of methodologies to sustain and enhance commercial fisheries.

### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Monitored and maintained a total of 59 fish aggregating device (FAD) sites statewide. Some 747,000 pounds of pelagic fishes were caught around the FADs during slightly more than 7,000

fishing trips. Thirty FADs were replaced and light pack maintenance was performed for on-station FADs.

- Released coded-wire, tagged mullet fingerlings in Hilo Bay and adjacent sites. Surveyed fishermen to identify and collect tagged mullet that are entering the fishery.
- Established a Bottomfish Task Force composed of fishermen, scientists, resource managers, and other interested parties, to develop a management plan to protect and restore crucial bottomfish stocks.

### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Completed preparation of draft bottomfish rules to restore stocks of six species of snapper and one grouper, two of which (onaga and ehu) are believed to be at critically low levels. Rules were drafted with input from members of the Bottomfish Task Force and were implemented in 1998.
- Funded various research projects related to bottomfish management, including identification and characterization of critical habitat, particularly nursery grounds; development of capture methods



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and techniques to maintain fish in captivity for growth and survival studies; genetic and otolith analyses of fish from different areas to determine population structure.

- Conducted public meetings on Kaua'i, Maui, and O'ahu to provide information and solicit input from various user groups participating in the akule fishery.
- Successfully spawned native striped mullet at the State Fishery Station in Hilo. Continued tagging and release of fingerlings into Hilo area waters, and analysis of recruitment into fishery through recaptures.
- Initiated revision of fish catch report form to improve catch and effort data, and landing revenue data.
- Began work on a new commercial fish dealer reporting system designed to automate collection and processing of data. The new system will reduce paperwork, enhance data processing, and facilitate reporting through electronic transmission of data. It will also improve the quality of data by cross-referencing sales reported by fishermen, place a more accurate value on the commercial fishery, and provide better size-weight frequency data.

AQUATIC RESOURCES  
PROTECTION PROGRAM

## PROGRAM DESCRIPTION.

This program preserves and enhances native and other resident fish and aquatic species, including their habitats, through active protection and other management measures.

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Conducted annual marine surveys of all ten Marine Life Conservation Districts, three Fisheries Management Areas, and four other sites statewide. Conducted additional coral reef monitoring at Molokini Shoal, and monitored several sites along the Kona coast to study impact of aquarium fish collecting and tour diving.
- Established Hawai'i Administrative Rule (HAR) 13-60, Kīholo Bay Fisheries Management Area, Hawai'i island, to protect green sea turtles from gill nets.
- Completed subsistence fishing pilot demonstration project at Mo'omomi-Kawa'aloa Bays, Moloka'i, as required by Act 271 of the 1994 Legislature.
- Sponsored annual conference of the Western Association of Fish

*The ocean brings in over \$3 billion each year in gross revenue, through commercial fishing, ocean recreation, shipping, aquaculture and research and development.*



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- and Wildlife Agencies, involving over 300 resource managers, scientists, and administrators from 17 western states and two Canadian provinces.
- Prepared evaluations for 259 requests for technical guidance, including permit applications, environmental impact statements, land title proceedings, agency project proposals, and other related matters.
  - Continued studies focusing on impacts of erosion, sedimentation, longshore transport, turbidity, runoff, reef overgrowth, nutrient and pollution uptake, etc. on inshore fish habitats.
  - Continued compiling and documenting recommendations to revise fisheries management and monitoring practices, including changes in regulations based on biologically recommended minimum size and seasonal restrictions, gear restrictions, comprehensive stock management, catch limits, and increased community involvement.
  - Conducted curriculum workshops and presentations for 137 teachers; reached over 5,200 students through classroom presentations; conducted conservation education courses for 1,818 participants.
  - Continued airing 30- and 60-second television spots on catch-and-release, fishing safety, marine debris, and releasing exotic fish species.
  - Conducted fishing survey targeting local fishermen with questions pertaining to their views, opinions, and experiences fishing in Hawai'i.
  - Produced division newsletter *Currentline* to provide communication link with general public about division's programs and projects.
- PROGRAM ACCOMPLISHMENTS, FY 1997-98.
- Supported Act 243 of the 1998 Legislature, which authorizes the Department to assess civil penalties for fishing violations; the option now exists to assess monetary fines rather than criminal penalties.
  - Provided technical assistance to Moloka'i residents wishing to establish a permanent community-based subsistence fishing area under the auspices of Act 271 of the 1994 Legislature.
  - Sponsored International Coral Reef Monitoring Workshop in cooperation with the East-West Center; presentations on reef monitoring programs and workshop discussions on monitoring techniques, database management, and community involvement attended by over 100 scientists, researchers, managers from around the world, and the public.
  - Prepared evaluations for 298 requests for technical guidance, including permit applications, environmental impact statements, land title proceedings, agency project proposals, and other related matters.
  - Conducted annual marine surveys of all ten Marine Life Conservation Districts, three Fisheries Management Areas, and two other sites statewide. Continued additional coral reef monitoring at Molokini Shoal, and monitored several sites along the Kona coast to study impact of aquarium fish collecting and tour diving. Surveyed 'Āhihi-La Perouse Bays and Cape Kīna'u, Maui to assess status of marine resources within and outside the area.
  - Intensified environmental monitoring of Kāne'ohe Bay, especially with regard to introduced *Kappaphycus* algae to evaluate extent of spread and possible remediation.



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- Completed assessment of sea urchin (wana) populations at Old Kona Airport Marine Life Conservation District in cooperation with local kūpuna (elders) and other community members. Prepared draft of administrative rule to allow traditional gathering of wana for home consumption.
- Expanded involvement with Department of Education's Distance Learning Technology program to present information on aquatic resources to 200 Hawai'i classrooms and an estimated 330,000 mainland viewers.
- Continued airing 30- and 60-second television spots on catch-and-release, fishing safety, marine debris, and releasing exotic fish species.
- Established community volunteer program to monitor public beaches where monk seals "haul out" of the ocean. Produced public service announcements focusing on responsible interaction with marine mammals and sea turtles.

increases the quality, quantity, and diversity of recreational fishing opportunities in both fresh and salt water; and enriches the leisure time of people of all ages by providing opportunities and facilities for developing skills and participating in other non-organized outdoor recreation such as snorkeling, underwater photography, and nature studies of aquatic organisms and their habitats.

### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Constructed over 2,000 fish habitats from donated concrete, and deployed most habitats at Maunaloa Bay and Wai'anae artificial reefs, O'ahu. Scuttled a 43-foot ketch at 'Ewa deepwater artificial reef, O'ahu. Monitored resident fish populations on artificial reefs at Maunaloa Bay and Wai'anae, Keawakapu (Maui) and other potential artificial reef sites.
- Conducted surveys of Wai'āhole Stream, O'ahu, to monitor effects of stream restoration, including studies of fish abundance and diet, hinana recruitment, and atyid shrimp distribution. Conducted studies of fish diet and recruitment in Mānoa Stream, O'ahu.
- Surveyed a variety of streams and other aquatic habitats

statewide to determine presence or absence of native and exotic species, and characterize migration of native species.

- Continued manual control efforts for removal and eradication of water hyacinth from Lake Wilson, O'ahu. Removed over 23 acres of the plant, which could ultimately produce anoxic conditions and massive fish kills.
- Evaluated 49 proposed activities for potential impact on freshwater fisheries, habitat concerns, and fishing activities.
- Produced eleven journal publications reporting studies on native freshwater ecosystems. Completed editing and publication of the Proceedings of the October 1994 Hawai'i Stream Restoration Symposium.
- Closed the Waikiki -Diamond Head Shoreline Fisheries Management Area to fishing for one year from January 1, 1997, and monitored fish population trends.
- Opened the Nu'uanu Public Fishing Area, O'ahu for fishing during three periods totaling 42 weekend days, during which 913 channel catfish were taken by 4,088 anglers. About 3,000 juvenile catfish were stocked.

## RECREATIONAL FISHERIES PROGRAM

### PROGRAM DESCRIPTION.

This program protects, restores, and conserves fishery resources;

## DIVISION OF AQUATIC RESOURCES

- Opened the Kōke'e Public Fishing Area, Kaua'i to fishing for rainbow trout during August and September. A recorded 2,911 anglers took 7,666 fish. About 50,000 trout fingerlings were stocked in the reservoir.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Constructed 3,780 "Z-shaped" fish habitats with donated concrete. Added 1,791 of these, along with 1,200 tons of concrete pier pilings, to the Maunalua Bay Artificial Reef, O'ahu. Scuttled a 63-foot vessel at the Keawakapu Artificial Reef, Maui, and a 110-foot Navy barge at the Maunalua Bay Artificial Reef. Monitored resident fish populations at existing and potential artificial reef sites.
- Amended HAR 13-62 to establish "catch and release" regulations for bass and tucunare in Lake Wilson, O'ahu, effective July 1998.
- Continued surveys in a variety of streams and other aquatic habitats statewide to determine presence or absence of native and exotic species. These included 24-hour monitoring of selected streams to characterize hatching and downstream migration of native stream fish larvae.
- Provided funding for research that discovered the homing mechanism for native gobies as they return from the initial oceanic portion of their life cycle to stream habitats. The discovery of specific pheromones as homing cues is of crucial importance to stream management, especially with regard to restoring native fish populations.
- Supported research into effects of introduced parasites on native stream fishes, and funded production of a manual for biological monitoring and assessment of Hawaiian streams.
- Opened the Waikiki-Diamond Head Shoreline Fisheries Management Area to fishing for one year from January 1, 1998, and monitored fish population trends.
- Opened the Nu'uau Public Fishing Area, O'ahu for fishing during three periods totaling 46 weekend days, during which 2,599 channel catfish were taken by 5,041 anglers. About 5,000 juvenile catfish were stocked.
- Opened the Kōke'e Public Fishing Area, Kaua'i to fishing for rainbow trout during August and

September. A recorded 2,721 anglers took 10,151 fish. About 50,000 trout fingerlings were stocked in the reservoir. Supported assessment of Kōke'e streams as habitat for year-round catch and release for rainbow trout without annual stocking.



**SEA CATCH BY SPECIES**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
Tuna (unclass)	17,018	16,675	31,616
Aku	2,207,445	2,112,597	2,719,867
'Ahi (yellowfin)	4,392,781	4,267,745	10,030,155
'Ahipalaha	3,661,164	3,652,098	4,179,269
'Ahi (bigeye)	4,015,009	4,003,073	12,063,555
'Ahi (bluefin)	14,034	14,034	204,673
Kawakawa	10,335	7,453	8,393
Billfish (unclass)	1,214	1,214	723
Black marlin	21,660	21,138	24,305
Blue marlin	1,271,552	1,165,313	1,117,314
Sailfish	16,230	15,692	14,011
Short spearfish	245,913	233,686	217,094
Striped marlin	995,955	967,743	1,248,151
Swordfish	4,490,098	4,460,832	13,279,583
Mahimahi	1,099,501	1,024,448	1,798,470
Malolo	3	0	0
Mola Mola	20	20	9
Monchong	134,840	134,477	221,270
Ono	663,244	599,161	1,216,410
Opah	631,491	631,251	713,508
Walu	570	370	277
Alfonsin	78	78	227
'Ehu	42,515	40,007	155,126
Onaga	101,823	96,851	551,178
Golden kali	104	100	244
Hāpu'upu'u	60,541	58,029	197,978
Hogo	3,047	2,804	14,480
Kāhala	7,697	417	585
Kalekale	33,597	30,658	84,435
Lehi	12,002	11,302	34,246
'Ōpakapaka	268,288	256,834	1,120,913
Randall's snapper	15	15	36
Ta'ape	59,472	54,077	50,570
'Ukikiki	8,438	8,000	22,292
Uku	121,519	116,610	312,830
Yellow-tail kali	41	0	0
'Omaka	281	280	901
'Omilu	3,647	2,869	4,996
Ulua (unclass)	36,449	29,706	61,788
Ulua (buta)	62,050	59,172	98,242
Ulua (dobe)	259	197	559
Ulua (gunkan)	1,288	1,125	2,070
Ulua (kihikihiki)	559	328	494
Ulua (menpachi)	478	423	969
Ulua (papa)	7,884	7,359	15,067
Ulua (paopao)	2	2	6
Ulua (white)	10,902	9,786	10,501
'A'awa	3,085	2,767	2,893
'Aha'aha	208	192	147
Āholehole	4,433	3,991	9,812
Akule	540,156	484,814	861,434
'Ala'ihe	134	128	289
Ama'ama	6,305	5,593	15,058
Awa	483	429	584

**SEA CATCH BY SPECIES, CONTINUED**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
Awa'awa	514	506	617
'Āweoweo	6,009	5,571	14,695
'Ea	144	122	131
Hahalalu	20,783	19,952	41,394
Hilu	18	18	13
Hinālea	222	188	127
Humuhumu	209	25	17
'Ihe'ihe	3	1	2
Kākū	26,914	24,891	19,201
Kala	10,115	9,049	10,329
Kamanu	5,906	4,873	6,569
Kawe'e'a	4,273	3,575	4,801
Ke'oke'o	110	22	31
Kole	2,289	1,255	2,362
Kūmū	4,755	4,279	25,420
Kūpipi	159	127	258
Kūpoupou	103	101	314
Lae	673	563	816
Laenihi	4,489	3,045	18,302
Lauwiliwili	0	0	0
Mā'i'i'i	10	1	1
Maiko	3,457	3,427	2,201
Malu	226	218	776
Manini	15,764	14,738	31,371
Manō	14,962	4,488	5,468
Manō (hammerhead)	162	0	0
Manō (kihi)	0	0	0
Manō (mako)	36,416	33,397	35,365
Manō (thresher)	18,215	16,489	13,884
Manō (tiger)	508	293	79
Maomao	2,048	2,030	3,558
Moana	5,526	4,439	14,834
Moana kali	3,339	3,118	20,413
Moi	882	598	2,622
Mū	2,140	2,022	4,644
Munu	115	90	664
Na'ena'e	5,612	5,589	4,860
Nenu	10,447	9,526	9,786
Nohu	551	519	1,307
Nūnū	146	118	139
'Ōlililepa	2,573	2,377	4,668
'O'opuhue	4	0	0
'Oio	4,189	3,601	4,264
'Ōpelu	342,148	321,241	495,223
'Ōpelu kala	3,567	2,917	2,739
'Ōpelu mama	66	31	63
'Ōpule	7	7	10
Pāki'i	33	32	35
Pāku'iku'i	210	164	208
Palani	29,582	29,231	36,828
Pānahunuhu	1,308	1,295	3,848
Pānūnū	47	46	134
Po'opa'a	626	601	1,180
Po'ou	36	14	21

**SEA CATCH BY SPECIES, CONTINUED**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
Pualu	4,183	4,070	5,397
Puhi (unclass)	642	601	452
Puhi (white)	209	168	206
Roi	381	252	553
Saba	118	117	250
Summer mullet	62	21	59
Tilapia	3,179	2,906	2,339
Toau	1,680	1,551	4,698
Uhu	29,664	27,255	61,884
Uouoa	856	851	2,103
‘Ūpapalu	43	30	42
‘Ū‘ū	47,324	44,342	131,534
‘U‘ukanipō	234	202	514
Wahanui	201	123	116
Weke	34,837	33,848	58,129
Weke pueo	23	4	12
Weke ‘ula	25,312	22,766	67,563
Slipper lobster	5,337	5,291	61,115
Spiny lobster	32,169	30,242	468,967
Crab (unclass)	238	158	571
‘A‘ama crab	1,037	933	6,523
Kona crab	29,033	24,123	114,174
Kuahonu crab	5,474	4,887	15,779
Samoan crab	22	15	125
‘Ōpae	310	310	1,550
Shrimp (ensifer)	1,095	960	1,200
Shrimp (laevigatus)	32,694	32,144	169,719
He‘e (octopus)	19,337	14,627	41,871
Lole (sea cucumber)	54	54	422
Mūhe‘e (squid)	2,979	2,454	5,223
‘Ōpihi	10,326	9,011	33,936
Pupu	11	11	33
Wana (sea urchin)	30	0	0
Limu (unclass)	823	553	1,900
Limu (kohu)	3,547	3,506	30,499
Limu (manauea)	389	389	1,164
Limu (ogo)	1,488	1,133	3,566
Limu (wāwaeiole)	2,346	2,283	2,947
Black coral	4,990	2,682	68,169
Miscellaneous	13,205	12,947	52,346
<b>TOTAL SEA CATCH</b>	<b>26,196,349</b>	<b>25,442,603</b>	<b>54,983,843</b>

**POND HARVEST BY SPECIES**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
‘Aha‘aha	2	2	0
‘Āholehole	176	176	457
‘Ama‘ama	128	128	480
Awa	216	216	367
‘Awa‘awa	562	562	975
Kākū	749	749	2,880

**POND HARVEST BY SPECIES, CONTINUED**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
Kawele‘a	3	3	5
Kupipi	2	2	1
Lae	76	76	76
Moi	1,334	1,334	7,751
‘Ōio	2,350	2,350	3,934
Pualu	237	237	351
Crab (unclass)	60	0	0
Samoan crab	383	371	1,965
Summer mullet	36	36	96
Ta‘ape	2	2	2
Tilapia	105	105	186
Toau	344	344	1,529
Ulua (unclass)	1,408	1,408	3,288
Limu (unclass)	36,000	36,000	77,000
Miscellaneous	3,338	3,338	10,957
<b>TOTAL POND HARVEST</b>	<b>47,511</b>	<b>47,439</b>	<b>112,302</b>
<b>GRAND TOTAL</b>	<b>26,243,860</b>	<b>25,490,042</b>	<b>55,096,145</b>

**SEA CATCH BY ISLAND**

ISLAND	LBS LANDED	LBS SOLD	VALUE (\$)
Hawai‘i	3,860,736	3,653,161	6,348,861
Maui	583,090	440,176	1,214,824
Lāna‘i	23,213	17,222	42,935
Moloka‘i	55,092	49,749	170,968
O‘ahu	20,696,035	20,472,403	45,340,650
Kaua‘i & Ni‘ihau	978,183	809,892	1,865,606
<b>TOTAL</b>	<b>26,196,349</b>	<b>25,442,603</b>	<b>54,983,843</b>

**POND HARVEST BY ISLAND**

ISLAND	LBS LANDED	LBS SOLD	VALUE (\$)
Hawai‘i	3,362	3,362	11,099
O‘ahu	44,149	44,077	101,204
<b>TOTAL</b>	<b>47,511</b>	<b>47,439</b>	<b>112,302</b>

**TOTAL CATCH BY ISLAND**

ISLAND	LBS LANDED	LBS SOLD	VALUE (\$)
Hawai‘i	3,864,098	3,656,523	6,359,960
Maui	583,090	440,176	1,214,824
Lāna‘i	23,213	17,222	42,935
Moloka‘i	55,092	49,749	170,968
O‘ahu	20,740,184	20,516,480	45,441,853
Kaua‘i & Ni‘ihau	978,183	809,892	1,865,606
<b>TOTAL</b>	<b>26,243,860</b>	<b>25,490,042</b>	<b>55,096,146</b>



**SEA CATCH BY SPECIES**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
Tuna (unclass)	44,517	33,235	83,686
Aku	2,198,701	2,103,280	2,636,490
'Ahi (yellowfin)	3,777,317	3,657,412	8,650,968
'Ahipalaha	2,518,322	2,474,793	3,094,292
'Ahi (bigeye)	6,414,064	6,336,450	18,561,291
'Ahi (bluefin)	9,590	9,590	77,055
Kawakawa	8,429	5,818	7,246
Billfish (unclass)	1,547	713	1,402
Black marlin	10,123	9,422	12,110
Blue marlin	1,406,922	1,286,665	1,337,259
Sailfish	17,425	16,552	22,176
Short spearfish	158,753	148,981	146,499
Striped marlin	557,917	547,246	882,048
Swordfish	3,821,817	3,812,632	9,115,647
Mahimahi	620,985	573,114	1,455,942
Malolo	20	20	38
Mola Mola	436	10	1
Monchong	189,643	187,937	286,196
Ono	660,319	600,809	1,389,616
Opah	618,483	612,789	775,155
Walu	1,408	266	308
Alfonsin	64	37	97
Armor head	9	0	0
'Ehu	44,926	41,793	155,841
Onaga	115,731	110,686	610,087
Golden kali	92	76	195
Hāpu'upu'u	73,222	69,691	199,523
Hogo	3,911	3,567	14,103
Kāhala	24,217	2,420	2,141
Kalekale	30,806	28,045	77,597
Lehi	9,405	8,904	27,365
'Ōpakapaka	230,409	220,704	1,010,946
Randall's snapper	18	0	0
Ta'ape	84,930	72,696	69,783
'Ukikiki	9,473	8,199	21,614
Uku	105,941	100,617	301,548
Yellow-tail kali	25	0	0
'Omaka	279	274	900
'Omilu	2,382	1,763	3,231
Ulua (unclass)	43,670	35,170	67,540
Ulua (buta)	41,177	36,960	55,135
Ulua (dobe)	2,954	2,954	4,903
Ulua (gunkan)	445	383	765
Ulua (kihikihi)	1,296	1,106	2,204
Ulua (menpachi)	295	146	248
Ulua (papa)	3,151	2,780	6,260
Ulua (white)	8,385	7,839	9,852
'A'awa	3,059	2,730	3,021
'Aha'aha	263	249	295
Āholehole	3,554	3,182	9,232
Akule	1,402,361	1,259,090	1,740,055
'Ala'ihe	180	173	372
Ama'ama	6,258	5,777	16,421
Awa	1,669	1,476	2,019

**SEA CATCH BY SPECIES, CONTINUED**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
'Awa'awa	255	223	252
'Āweoweo	4,761	4,157	10,438
'Ea	256	248	269
Hahalalū	66,636	63,531	94,216
Hilu	28	28	21
Hinālea	189	172	127
Humuhumu	275	22	103
Kākū	19,273	18,097	14,549
Kala	16,088	15,161	17,675
Kamanu	7,058	6,456	8,295
Kawe'le'ā	3,366	3,133	4,852
Ke'oke'o	59	38	44
Kole	3,176	2,315	4,204
Kūmū	5,353	4,931	33,245
Kūpipi	143	138	158
Kūpoupou	15	15	33
Lae	867	754	1,185
Laenihi	6,179	4,130	21,478
Lauwiliwili	1	0	0
Maiko	3,662	3,621	2,451
Makiawa	21	20	50
Malu	220	204	725
Manini	12,959	12,331	27,431
Manō	24,860	1,989	1,750
Manō (hammerhead)	1,059	0	0
Manō (mako)	49,811	44,938	45,742
Manō (thresher)	31,210	24,962	21,878
Manō (tiger)	3,600	0	0
Maomao	913	882	1,730
Moana	4,550	3,546	11,874
Moana kali	3,875	3,521	25,570
Moi	2,033	1,328	5,811
Mū	2,076	1,936	4,957
Munu	326	313	2,211
Na'ena'e	6,274	6,233	5,635
Nenu	9,886	7,871	9,736
Nohu	791	683	1,966
Nūnū	67	56	63
'Ōlililepa	2,270	2,196	4,246
'Oio	3,564	2,969	3,413
'Ōpelu	291,088	276,558	436,602
'Ōpelu kala	5,522	5,172	5,154
'Ōpelu mama	40	26	51
'Ōpule	0	0	0
Pāki'i	55	46	44
Pāku'iku'i	282	258	435
Palani	39,249	38,228	47,134
Pānuhunuhu	1,195	1,160	3,054
Pānūnū	22	15	32
Po'opa'a	1,303	1,264	2,919
Po'ou	4	1	2
Pualu	7,730	7,550	9,698
Puhi (unclass)	600	585	394
Puhi (white)	196	97	120

**SEA CATCH BY SPECIES, CONTINUED**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
Roi	399	298	626
Saba	34	34	68
Summer mullet	59	53	130
Tilapia	70	0	0
Toau	3,769	3,651	11,893
Uhu	35,913	33,651	77,159
Uouoa	301	297	797
‘Ūpapalu	2	1	1
‘Ū‘ū	48,841	45,312	139,143
‘U‘ukanipō	97	91	183
Wahanui	320	223	251
Weke	32,771	30,822	54,339
Weke pueo	4	0	0
Weke ‘ula	25,455	21,998	65,765
Slipper lobster	44,516	44,433	421,094
Spiny lobster	57,631	55,637	754,048
Crab (unclass)	220	148	543
‘A‘ama crab	488	448	2,958
Kona crab	29,210	23,292	105,706
Kuahonu crab	16,656	16,517	54,679
Samoan crab	20	8	39
‘Ōpae	1,300	1,143	6,780
Shrimp (ensifer)	280	0	0
Shrimp (laevigatus)	13,210	12,612	86,837
He‘e (octopus)	25,874	17,879	49,961
Lole (sea cucumber)	77	77	530
Mūhe‘e (squid)	5,864	4,432	7,489
‘Opihi	11,852	10,274	43,130
Pupu	12	6	22
Wana (sea urchin)	16	0	0
Limu (unclass)	916	468	2,571
Limu (kohu)	2,999	2,794	23,865
Limu (manauea)	522	522	1,566
Limu (ogo)	1,556	1,083	3,058
Limu (wāwaeiole)	91	11	28
Black coral	432	379	10,625
Miscellaneous	7,821	6,928	9,034

**TOTAL SEA CATCH 26,306,184 25,356,851 55,777,659**

**POND HARVEST BY SPECIES**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
‘Aha‘aha	12	12	17
‘Āholehole	288	288	1,170
‘Ama‘ama	83	83	346
Awa	72	72	108
‘Awa‘awa	264	264	367
Kākū	626	626	2,435
Kawe‘ele‘a	13	13	16
Kupipi	1	1	1
Lae	61	61	59
Moi	7	7	38

**POND HARVEST BY SPECIES, CONTINUED**

SPECIES	LBS LANDED	LBS SOLD	VALUE (\$)
‘Ōio	2,553	2,553	3,521
Pualu	521	521	778
Crab (unclass)	937	937	2,244
Samoan crab	200	200	977
Summer mullet	27	27	81
Ta‘ape	4	4	4
Tilapia	187	187	461
Toau	576	576	2,148
Miscellaneous	972	972	2,448
<b>TOTAL POND HARVEST</b>	<b>7,404</b>	<b>7,404</b>	<b>17,215</b>

**GRAND TOTAL 26,313,588 25,364,255 55,794,874**

**SEA CATCH BY ISLAND**

ISLAND	LBS LANDED	LBS SOLD	VALUE (\$)
Hawai‘i	3,443,784	3,235,995	6,143,630
Maui	665,254	537,922	1,239,726
Lāna‘i	20,204	13,330	31,294
Moloka‘i	62,115	52,882	187,173
O‘ahu	21,117,947	20,652,530	46,269,053
Kaua‘i & Ni‘ihau	996,880	864,192	1,906,782
<b>TOTAL</b>	<b>26,306,184</b>	<b>25,356,851</b>	<b>55,777,659</b>

**POND HARVEST BY ISLAND**

ISLAND	LBS LANDED	LBS SOLD	VALUE (\$)
Hawai‘i	1,374	1,374	4,062
O‘ahu	6,030	6,030	13,153
<b>TOTAL</b>	<b>7,404</b>	<b>7,404</b>	<b>17,215</b>

**TOTAL CATCH BY ISLAND**

ISLAND	LBS LANDED	LBS SOLD	VALUE (\$)
Hawai‘i	3,445,158	3,237,369	6,147,692
Maui	665,254	537,922	1,239,726
Lāna‘i	20,204	13,330	31,294
Moloka‘i	62,115	52,882	187,173
O‘ahu	21,123,977	20,658,560	46,282,207
Kaua‘i & Ni‘ihau	996,880	864,192	1,906,782
<b>TOTAL</b>	<b>26,313,588</b>	<b>25,364,255</b>	<b>55,794,874</b>

TYPE	HAWAII		MAUI		KAUAI		OAHU		MOLOKAI		STATEWIDE	
	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL
	1996/97	1997/98	1996/97	1997/98	1996/97	1997/98	1996/97	1997/98	1996/97	1997/98	1996/97	1997/98
<b>RESIDENT</b>												
Number	896	672	310	307	295	270	1,955	2,222	70	50	3,526	3,521
Amount	\$22,400	\$16,850	\$7,750	\$7,675	\$7,375	\$6,750	\$48,875	\$55,550	\$1,750	\$1,250	\$88,150	\$88,075
<b>NON-RESIDENT</b>												
Number	20	20	4	1	4	1	78	105	0	0	106	127
Amount	\$1,000	\$1,000	\$200	\$50	\$200	\$50	\$3,875	\$5,250	\$0	\$0	\$5,275	\$6,350
<b>SPEC. MARINE PROD.</b>												
Number	43	38	6	6	2	8	131	67	0	0	182	119
Amount**	\$150	\$130	\$15	\$18	\$5	\$20	\$365	\$190	\$0	\$0	\$534	\$357
<b>COMMERCIAL BAIT</b>												
Number	4	8	8	10	6	3	40	43	8	5	66	69
Amount	\$4	\$8	\$8	\$10	\$6	\$3	\$40	\$43	\$8	\$5	\$66	\$69
<b>NWHI*</b>												
Number	1	1	0	0	2	0	13	10	0	0	16	11
Amount	\$1	\$1	\$0	\$0	\$2	\$0	\$13	\$10	\$0	\$0	\$16	\$11
<b>TOTAL</b>												
Number	964	739	328	324	309	282	2,217	2,447	78	55	3,896	3,847
Amount**	\$23,555	\$17,989	\$7,973	\$7,753	\$7,588	\$6,823	\$53,168	\$61,043	\$1,758	\$1,255	\$94,041	\$94,862

\* Northwestern Hawaiian Islands (Leeward Islands)

\*\* Fractional amount (less than a dollar ) excluded

## **DIVISION OF BOATING AND OCEAN RECREATION**

The beautiful Pacific Ocean surrounds the Hawaiian islands and provides some of the most exciting ocean recreation opportunities in the world. Hawai'i as an ocean state has an ancient heritage of using the sea for transportation, for sustenance and for recreation. Today, this cultural heritage endures and supports a \$797 million ocean recreation industry. Our small boat harbors and launch ramps are gateways not only to the Pacific Ocean but to the future as well.

The Division of Boating and Ocean Recreation (DOBOR) is responsible for the



## DIVISION OF BOATING AND OCEAN RECREATION

management and administration of statewide ocean recreation programs. This includes 22 small boat harbors, 54 launching ramps, 13 offshore mooring areas, 10 designated ocean water areas, 108 designated ocean recreation management areas, associated aids to navigation throughout the state, and beaches encumbered with easements to provide for public use.

### HIGHLIGHTS

The popularity of nearshore sports activities and the expansion of commercial operations continue to challenge the carrying capacity of Hawai'i's ocean resources.

DOBOR concentrates on implementing innovative resource management techniques, and establishing strong community ties. The division encourages citizen input on plans to improve Hawai'i's small boat harbors, and to effectively resolve user conflicts.

The division provided administrative support to two Legislative-mandated advisory groups that were tasked to review and make recommendations on localized boating issues. In 1997, the Community Based Management Task Force was formed to evaluate the feasibility of

establishing a community-based management pilot program for one or more of the state-run small boat harbors. In 1998, the Thrill Craft Advisory Committee was established to review safety issues stemming from the increasing popularity of recreational thrill craft use, and to make recommendations about implementing operator education and certification requirements.

The division also put forth an effort to ensure the highest level of fiscal integrity through better record keeping and tracking of delinquent accounts. This was initiated with the installation of new computers and software to upgrade DOBOR's outdated, semi-automatic accounting system to a real time program. The new technology links all state boating systems statewide and results in timely printing of accounting statements, which in turn fosters more efficient collection of revenues. Harbor agents are now able to obtain current data on all customer accounts from their individual work stations upon demand.

DOBOR also strives to meet the needs of repairing and improving Hawai'i's boating facilities. During FY 1996-97, DOBOR completed 20 construction projects at a cost of over \$1.6 million. In FY 1997-98,

*The popularity of near-shore sports activities and the expansion of commercial operations continue to challenge the carrying capacity of Hawai'i's ocean resources.*



## DIVISION OF BOATING AND OCEAN RECREATION

the division completed another ten projects amounting to nearly \$1 million; and awarded three projects amounting to \$735,463, which are currently under construction. However, there are many more needed construction projects that await funding. It is the division's goal to turn around a backlog of maintenance and repair items at boating facilities that deteriorate at a faster rate than they can be repaired.

*The following are accomplishments for FYs 1996-1997 and 1997-1998:*

## FY 1996-97

- Issued 15,177 Certificates of Number to vessels in the state.
- Investigated and processed 46 reportable accidents.
- Issued 1 revocable use permit.
- Implemented real time boating revenue computer application in O'ahu and Maui districts.
- Produced financial statements for fiscal years 1997 and 1998.
- Completed second phase of clean-up of Ke'ehi Small Boat Harbor's north lagoon waters by the U.S. Navy.
- Reduced length of wait list applicants for slip rentals.
- Began review process for Hanalei and Kāne'ohe Bay rules packets.

- Coordinated the National Safe Boating Week observance in Hawai'i.
- Established partnerships with local boating organizations and Hawai'i's school system to promote boating safety education.

## FY 1997-98

- Issued 15,138 Certificates of Number to vessels in the state.
- Investigated and processed 43 reportable accidents.
- Issued 6 revocable use permits.
- Conducted over 20 financial audits of commercial tour boat operators, uncovering \$500,000 in unpaid fees.
- Conducted audits of other commercial operators statewide, increasing boating funds by over \$10,000 per year.
- Received report from State Auditor's office that critiques and supports DOBOR initiatives.
- Initiated concurrent resolution to lease submerged lands to a private ocean activities and recreational facility, Ala Wai, O'ahu.
- Collected over \$700,000 of rents in arrears.
- Assisted with development plans for two new private yacht club facilities on Kaua'i and Hawai'i islands.

- Negotiated long-term lease with Lāna'i Company that will expand facilities at Mānele Small Boat Harbor.
- Completed third phase of clean-up of Ke'ehi Small Boat Harbor's north lagoon waters by the U.S. Navy.
- Continued partnerships with volunteers to conduct statewide harbor clean-ups.
- Exhibited boating safety display booth in various community events and fairs.
- Completed production of hurricane safety manual and accompanying quick reference card.
- Began review process for Wailua River, Sans Souci, and day-use mooring rules packets.
- Began re-writing the boating rules in their entirety.

*The following construction/engineering projects were accomplished in FY1996-97 and FY 1997-98:*

## FY 1996-97

- Replaced Pier 400 at Ke'ehi Small Boat Harbor for \$403,584.
- Constructed comfort station at Māla Wharf for \$411,000.
- Replaced finger piers at Port Allen Small Boat Harbor for \$174,160.



## DIVISION OF BOATING AND OCEAN RECREATION


- Dredged Kīkīaola Small Boat Harbor for \$251,717.
- Repaired navigational aids at Ala Wai Small Boat Harbor for \$86,315.
- Repaired navigational aids at Maunaloa Bay for \$78,600.
- Completed improvements at Wailoa Boat Ramp facilities for \$16,192.
- Repaired parking lot at Wailoa Small Boat Harbor for \$19,800.
- Constructed security gates and fencing at Sand Island for \$17,633.
- Constructed security gates and fencing at Ke'ehi Small Boat Harbor for \$2,582.
- Repaired electrical switch panel at Hale'iwa Small Boat Harbor for \$4,000.
- Repaired service/access roads at Ala Wai Small Boat Harbor for \$24,880.
- Repaired parking lot at Ala Wai Small Boat Harbor for \$24,925.
- Repaired boat launch ramp at Ala Wai Small Boat Harbor for \$4,500.
- Constructed electrical transformer vault at Hale'iwa Small Boat Harbor for \$23,900.
- Completed improvements to comfort station at Kailua-Kona for \$18,800.
- Dredged North Kawaihae Boat basin for \$24,450.
- Repaired fender system at Kailua-Kona Wharf for \$8,000.
- Repaired range lights at Ala Wai Small Boat Harbor for \$24,500.
- Repaired boat ramp at Kīkīaola Small Boat Harbor for \$3,950.
- Dredged North Kawaihae Small Boat Harbor for \$24,990.
- Repaired area lighting and harbor marker lights at Kīkīaola Small Boat Harbor for \$43,199.
- Repaired area lighting at Nāwiliwili Small Boat Harbor for \$12,168.
- Repaired channel marker lights at Waikaea Canal, Kaua'i, for \$16,466.
- Constructed east and west breakwaters at Kawaihae Small Boat Harbor for \$8,742,000.

## FY 1997-98

- Replaced loading dock at Hale'iwa boat ramp for \$59,800.
- Completed road access at Maunaloa Bay Boat Ramp for \$67,000.
- Completed miscellaneous improvements at Maunaloa Bay Boat Ramp for \$548,000.
- Completed waterline improvements at Maunaloa Bay Boat Ramp for \$68,647.
- Installed 1-ton chain hoist at Wailoa Small Boat Harbor, makai west pier for \$4,300.
- Repaired electrical service and lighting at Wailoa Small Boat Harbor for \$76,221.
- Dredged North Kawaihae Small Boat Harbor for \$24,990.
- Repaired area lighting and harbor marker lights at Kīkīaola Small Boat Harbor for \$43,199.
- Repaired area lighting at Nāwili-



## **DIVISION OF CONSERVATION AND RESOURCES ENFORCEMENT**

The left side of the page features a large, semi-transparent graphic. It includes the Seal of the State of Hawaii, which is a circular emblem with a central shield depicting a mountain, a star, and a rising sun. The shield is flanked by two figures: a Native Hawaiian on the left and a European on the right. Above the shield is a banner with the motto 'UAE IKA MAU O KA MOLOKAU'. The entire seal is encircled by a rope-like border. The words 'STATE OF HAWAII' are arched across the top, and '1959' is at the bottom. Below the seal, there is a stylized map of the Hawaiian Islands. The islands are colored in a gradient from red to orange, with a textured, stippled appearance. The map shows the main islands and the Line Islands to the northeast.

From the mountains to the sea, Hawai‘i’s world-famous beauty comes from its natural resources, upon which our island economy depends. It is our privilege and challenge to protect and preserve the unique, rare and fragile natural resources of our islands. Many species of flora and fauna are not found anywhere else in the world.

To promote the safe and responsible use of Hawai‘i’s outstanding natural resources is the overall mission of the Division of Conservation and Resources Enforcement. DOCARE monitors and enforces Hawai‘i’s

**DIVISION OF CONSERVATION AND RESOURCES ENFORCEMENT**

natural resources laws and the Hawai'i penal code. Its officers are broadly commissioned with full police powers to enforce rules and regulations covering aquatic resources, boating and ocean recreation, forestry and wildlife, natural area reserves, historic sites, state parks, land and water resource management, and conservation districts. DOCARE also partners with other law enforcement agencies, assists with search and rescue missions, and conducts community outreach and education through the assistance of volunteer DOCARE officers.

With 92 regular full time officers for the entire state, it is a tremendous challenge to protect 6 million acres of state land, including 2 million acres of conservation land and 750 miles of coastline, the largest tropical forest and 11th largest state forest in the country. Lack of adequate conservation enforcement staff leaves the laws designed to protect our resources open to numerous violations.

**HIGHLIGHTS**

Recognizing the vulnerability of our natural resources, and their importance to our state's future, Governor Cayetano demonstrated his commit-

ment to protect and sustain them through a new "Ocean State Initiative" by providing increased funding to expand the officer staff of the Division of Conservation and Resources Enforcement to better enforce laws designed to protect the ocean. This has allowed DOCARE to expand and strengthen its monitoring and enforcement presence statewide.

Twenty-one new DOCARE officers were commissioned in October 1996 by Governor Cayetano, who also declared October 14-18, 1996 as Conservation and Resource Enforcement Week in Hawai'i. Eighteen of the new officers were former Marine Patrol Sheriffs who were transferred to DLNR by the 1996 Legislature. The remaining three were newly hired officers for the island of Kaua'i.

Sixteen new DOCARE officers were commissioned in April 1998. They were joined by 12 new volunteer officers, bringing DOCARE's full time officers to 92, and part-time volunteers to 47.

DOCARE also increased its presence at the Diamond Head State Monument to protect Hawai'i's most famous landmark from trailside vendors, and squatters. State rules were adopted in 1996 to regulate vending activities within Hawai'i's

state parks, such as Diamond Head. The rules protect freedom of expression by permitting individuals or organizations to hold assemblies, meetings or distribute or sell literature on state DLNR parks or beaches. However, the sale of merchandise is prohibited. New visitor signs in English and Japanese were installed in and around Diamond Head Crater to inform visitors that commercial activity is prohibited at the park, and that they are not obligated to buy any literature being offered at the park.

In January 1998, DOCARE officers acting on an anonymous tip caught two Honolulu fishermen in possession of chlorine, a highly poisonous chemical, along with a variety of reef fish. Nets, scuba equipment, various gear and the boat used in the offense were seized as a result of the investigation. About 100 pounds of menpachi, surgeonfish and other nearshore fish were caught, and other fish and marine life most likely died from the poison. The two cases were heard in Circuit Court. One individual was sentenced to pay a fine of \$500 and directed to complete 100 hours of community service. The second individual was sentenced to 150 hours of community service



## DIVISION OF CONSERVATION AND RESOURCES ENFORCEMENT

and fined \$750, with a year of probation and a suspended 30-day prison term. Equipment and the boat used were forfeited to the state, to be used by DOCARE.

The use of illegal gill nets continues to top the list of citations issued by DOCARE on O'ahu for fishing violations. This number is relatively high because fishermen are still using old nets, despite changes in the law in 1995 that raised the minimum mesh size allowed from 1-1/2 to 2 inches. In 1997, the minimum for gill nets went from 2 to 2-3/4 inches. The larger minimum mesh sizes were designed to prevent the taking of young, smaller fish, to allow species time to restore losses from fishing.

In the biennium, DOCARE and the Division of Aquatic Resources led the Department's efforts to retrieve abandoned nets from off-shore reefs and nearshore waters. Net cleanups on the windward and leeward coasts of O'ahu were also supported by community volunteers including fishermen, divers, students and the military.

*The following are accomplishments for FYs 1996-1997 and 1997-1998, combined:*

## ENFORCEMENT

- Completed the transfer of the former Marine Patrol Program into DOCARE.
- Began training of all Marine Patrol officers in DLNR law enforcement.
- Began training of all DOCARE officers in small boat recreational regulations and U.S. Coast Guard safe boating requirements.
- Evaluated and repaired equipment transferred to DOCARE from the former Marine Patrol Program.
- Renewed joint patrol missions with the U.S. Coast Guard.
- Continued enforcement efforts on and around Kaho'olawe island.
- Cited three persons at Diamond Head State Monument for selling T-shirts and beverages, which is prohibited on state land including parks, some beaches, forest reserves and historic preserves. The individuals were found in violation of both State Parks rules and DLNR's First Amendment rules concerning commercial activities on state land.
- Completed annual recall training and re-certification for enforcement officers and the canine program.

*It is a tremendous challenge to protect 6 million acres of state land, including 2 million acres of conservation land and 750 miles of coastline, the largest tropical forest and 11th largest state forest in the country.*

## DIVISION OF CONSERVATION AND RESOURCES ENFORCEMENT

- Conducted marijuana reconnaissance and eradication missions statewide in conjunction with county police departments, the U.S. Drug Enforcement Agency, National Guard and U.S. Army.
- Conducted routine enforcement activities statewide.
- Assisted with the development and passage of legislation (Chapter 183) to provide administrative penalties for forestry and wildlife violations.

## HUNTER EDUCATION PROGRAM

## PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Trained and certified 2,212 people through 79 Basic Hunter Education comprehensive 12-hour programs.
- A total of 7,239.5 hours of volunteer time was contributed by 72 volunteers, for an in-kind value of \$159,001.08. Average hours per volunteer in the fiscal year were 100.5.
- Volunteer bowhunter instructor and Hunter Education Program volunteer Alan Nakagawa of Waimea, Hawai'i was honored as Winchester Hunter Education

Volunteer Instructor of the Year for 1996. He was selected from among 55,000 volunteers in the U.S. and Canada.

- Hunting accidents involving firearms reported in 1997: 1 (non-fatal). In comparison, 2 (non-fatal) accidents were reported in FY 94-95.

## PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Trained and certified 2,008 people in 81 hunter education basic certification courses completed statewide.
- Total of 8,048 hours of volunteer time, was contributed by 65 volunteers, for an in-kind value of \$171,218.09. Average number of volunteer hours per fiscal year was 123.8.
- Volunteer and Distinguished Master Instructor Henry Yamada was selected as Outdoor Empire Hunter Education Instructor of the month (June 1997). He was chosen from 55,000 volunteers whose names were submitted in the U.S. and Canada.
- Hunting accidents involving firearms reported in 1998: 1 (non-fatal). In comparison, there was 1 (non-fatal) hunting accident reported in FY 1995-96.

- Issued 29 advanced bowhunter certificates to individuals completing the training course.
- One Hunter Education advanced bowhunter course was completed.
- Sixteen children ages 10-13 completed a four-day Hawai'i Conservation and Wilderness Education summer camp, presented by DOCARE's Hunter Education Program, the Safari Club International – Hawai'i Chapter and the W.T. Yoshimoto Foundation.
- National Hunting and Fishing Day activities at the Koko Head Public Shooting Range were attended by 400 people.



## BUREAU OF CONVEYANCES

Ever since the Māhele of 1848, in which Hawai‘i’s traditional land tenure system was converted to a system of private ownership, records of all real estate transactions have been preserved in one central office. Hawai‘i is the only state that has a single statewide recording office, the Bureau of Conveyances.

The mission of the Bureau is to maintain an accurate, timely, and permanent record system for title to real property in the State of Hawai‘i. The Bureau examines, records, indexes, and microfilms over 250,000 Regular System and Land Court documents and



## BUREAU OF CONVEYANCES

maps annually; issues Land Court Certificates of Titles; certifies copies of matters of record; and researches Uniform Commercial Code requests. Land title deeds, mortgages, leases, liens and other legal documents, as well as subdivision/ condominium maps, Land Court Application Maps and file plans are all filed at the Bureau. The public may review any indices, documents or maps on file in books, on microfiche or on microfilm.

The Bureau is also unique in that there are two separate recording systems. Documents relating to registered land are recorded in the Land Court system. When title is conveyed, the Bureau issues a certificate of title showing vested ownership, which is guaranteed by the State of Hawai'i. Unregistered land is recorded in the Regular System. Discrepancies arising in title to unregistered lands are settled in a court of law.

## HIGHLIGHTS

In FY 1997-98 the Bureau was able to reduce the backlog of recordings from ten months to four months. Good progress is being made to eliminate the backlog, anticipated for FY1999.

### *The following are accomplishments for FYs 1996-1997 and 1997-1998:*

FY 1996-97.

- Examined, recorded, and processed 178,929 documents in the Regular System and 73,191 documents in the Land Court System, and issued 16,799 Certificates of Title.
- Continued the collection of conveyance taxes for the Department of Taxation (TAX), the Rental Housing Trust Fund, Natural Area Reserves Fund and the Hawai'i Hurricane Relief Fund special mortgage recording fees for the Department of Commerce and Consumer Affairs (DCCA).
- Continued to conduct public tours of the office for students, professionals, and members of the general public.

FY 1997-98.

- Examined, recorded, and processed 192,668 documents in the Regular System and 82,113 documents in the Land Court System and issued 18,837 Certificates of Title.
- Continued the collection of conveyance taxes and special mortgage recording fees for

TAX, the Rental Housing Trust Fund, Natural Area Reserves Fund and DCCA.

- Continued to conduct public tours of the office for students, professionals, and members of the general public.
- Established a special modernization fund under Act 203, SLH 1997, from revenues generated by recordation fees to computerize the recordation process and enable recorded information to be posted online statewide. Proposals from vendors far exceeded the budget established under the modernization fund. The request for proposals was subsequently revised and will be reissued in FY 1999.



**RECEIPTS OF THE BUREAU OF CONVEYANCES**

FISCAL YEAR	RECEIPTS		
	REGULAR SYSTEM	LAND COURT SYSTEM	TOTAL
1985-86	902,447	654,922	1,557,369
1986-87	1,211,324	1,346,402	2,557,726
1987-88	1,256,560	1,304,988	2,561,548
1988-89	1,277,554	1,291,847	2,569,401
1989-90	1,748,500	1,515,672	3,264,172
1990-91	1,834,526	1,428,353	3,262,879
1991-92	4,007,062	1,523,387	5,530,449
1992-93	4,411,300	2,750,313	7,161,573
1993-94	4,465,227	3,089,843	7,555,070
1994-95	3,767,689	2,281,197	6,048,886
1995-96	3,416,944	1,982,811	5,399,755
1996-97	3,596,166	1,998,526	5,594,692
1997-98	4,594,984	2,563,942	7,158,926
Total	36,490,83	23,732,203	60,222,486

**DOCUMENTS RECEIVED AND CERTIFICATES OF TITLE ISSUED**

FISCAL YEAR	DOCUMENTS RECEIVED			LAND COURT CERTIFICATES OF TITLE ISSUED
	TOTAL	REGULAR SYSTEM	LAND COURT SYSTEM	
1985-86	236,769	156,938	79,831	11,474
1986-87	290,054	196,145	93,909	14,693
1987-88	280,751	190,243	90,508	16,480
1988-89	280,510	191,071	89,439	16,299
1989-90	305,387	205,445	99,942	20,826
1990-91	298,937	205,423	93,514	19,838
1991-92	298,916	199,480	99,436	21,186
1992-93	330,705	217,007	113,698	23,379
1993-94	343,915	224,015	119,900	23,634
1994-95	282,767	192,097	90,670	18,570
1995-96	252,722	176,425	76,297	18,126
1996-97	252,120	178,929	73,191	16,799
1997-98	274,781	192,668	82,113	18,837
Total	3,728,334	2,525,886	1,202,448	240,141

**VALUE OF PROPERTY TRANSFER IN HAWAII (IN THOUSANDS OF DOLLARS)**

FISCAL YEAR	O'AHU		HAWAII		MAUI		KAUAI		STATE VALUE
	% OF STATE	VALUE (\$1,000)	% OF STATE	VALUE (\$1,000)	% OF STATE	VALUE (\$1,000)	% OF STATE	VALUE (\$1,000)	
1985-86	67.4	2,623,227	10.1	392,623	13.9	541,935	8.6	335,562	3,893,347
1986-87	68.5	4,964,905	10.3	747,431	17.2	1,242,388	4.0	290,668	7,245,392
1987-88	74.5	5,927,159	9.9	791,379	11.2	892,110	4.4	347,502	7,958,150
1988-89	62.0	6,439,257	13.0	1,394,053	19.0	1,984,956	5.0	546,971	10,365,237
1989-90	63.0	10,250,752	12.0	1,978,400	20.0	3,177,647	5.0	748,087	16,154,886
1990-91	60.0	6,800,263	18.0	2,033,125	15.0	1,667,035	7.0	803,757	11,304,180
1991-92	70.9	5,682,158	13.2	1,059,606	11.6	931,820	4.3	347,322	8,020,906
1992-93	68.7	5,169,726	11.2	842,692	14.9	1,115,683	5.2	393,272	7,521,373
1993-94	71.7	11,336,029	10.5	1,655,988	13.7	2,171,251	4.1	648,900	15,812,168
1994-95	65.7	4,258,750	12.9	835,319	13.7	890,229	7.7	502,178	6,486,476
1995-96	67.7	4,187,566	13.3	819,964	13.9	860,211	5.1	316,401	6,184,142
1996-97	64.3	3,771,156	12.2	716,222	17.3	1,012,863	6.2	361,955	5,862,196
1997-98	57.5	3,973,383	15.0	1,035,586	21.4	1,474,351	6.1	422,666	6,905,986

## DIVISION OF FORESTRY AND WILDLIFE

Within their ocean sphere, the islands of Hawai‘i are one of Earth’s great treasures, blessed with an astonishing variety of unique natural environments and complex native ecosystems. Yet this once-isolated “paradise” bears the stark burden today of the most threatened biodiversity in the world.

The islands of Hawai‘i have nourished and fascinated humankind for thousands of years with their rainforests and fertile valleys, abundant streams, teeming reefs, lava summits and snowfields, plunging sea cliffs, and rugged canyons. Today, our natural



## DIVISION OF FORESTRY AND WILDLIFE

resources face an increasing pressure to sustain our community with the means for food, shelter, economic and recreational opportunities.

Division of Forestry and Wildlife (DOFAW) is the largest land management entity in the State of Hawai'i, with direct responsibility for approximately 800,000 acres of state trust lands. These lands are managed through an integrated system of forest and natural area reserves, plant and wildlife sanctuaries, and wilderness and game management areas. Within this system is the 11th largest area of state-managed forest lands in the United States, and the vast majority of America's tropical rainforests.

DOFAW is the oldest forest management agency in the western United States, originating in 1903 with a mandate to protect and enhance forested watersheds. The organization has evolved into one of the few professional forest and wildlife organizations in the United States with a diverse set of challenging proprietary and regulatory missions.

Responsibility is statewide for watershed and endangered species protection, wildland fire suppression, public trails and access, and game management programs. Cooperative

natural resource programs are also planned and implemented on other public and privately owned lands through natural area and watershed partnerships, forest stewardship programs, urban forestry projects and other agreements.

Budget reductions of 20% over the past six years continue to force program re-evaluation and downsizing of the division's management capabilities. DOFAW has five operational program areas: Watershed Protection and Management, Native Resources Protection and Management, Outdoor Recreation Resources Management and Development, Forest Products Development, and Public Information and Stewardship.

### HIGHLIGHTS

In 1997-98, DLNR began dialogue with major public and private landowners on O'ahu toward the goal of establishing the Ko'olau Mountains Watershed Partnership. The partnership will be focused on developing a detailed, cooperative management plan for this 100,000 acre watershed, that will benefit the public with improved resources conservation and more efficient use of funding and personnel.

In the biennium, DOFAW initi-

ated a number of significant efforts for the conservation of threatened and endangered native Hawaiian forest birds. The division launched a multi-year cooperative project with the U.S. Fish and Wildlife Service and U.S.G.S. Biological Resources Division for recovery of the endangered puaiohi. Activities will include locating nests, banding birds, collecting eggs for captive propagation, and maintaining predator control and active nests. In 1997-98, DOFAW collaborated with Maui Land and Pine, The Nature Conservancy Hawai'i, U.S.G.S. Biological Resources Division and U.S. Fish and Wildlife Service to conduct the first forest bird survey of West Maui since 1980.

In the same year, avian biologists were able to locate and carry out sexing tests of the country's most endangered bird – Maui's po'ouli. Test results showed that the world's only three known po'ouli remaining in their home ranges are two females and one male. Following this announcement, DOFAW held a critical meeting in May 1998 of natural resource managers, field biologists and conservation biologists to discuss any and all possible next steps for the recovery of this rare forest bird. The group reached con-

**DIVISION OF FORESTRY AND WILDLIFE**

sensus on continuing management priorities outlined in the Maui Forest Bird management plan, which calls for: public involvement in discussion of options; more effective predator control in the birds' habitat; captive rearing if a nest should be found with eggs. Action steps will include: immediate rat control efforts in the home ranges of the three birds and evaluation of the effectiveness of those control methods; monitoring of the known birds to learn more about their behavior, feeding habits and health; drafting required environmental documents for public review for recovery alternatives, and new surveys of the West and East home ranges of the po'ouli in hopes of locating more birds.

The prevention and control of alien species introductions to the state is the joint responsibility of the Hawai'i Department of Agriculture and Department of Land and Natural Resources. The Department of Agriculture regulates the import of alien species into the state. If populations become established in the state, their control is the responsibility of the DLNR. In March 1998, the Department participated in a two-day Brown Tree Snake coordination meeting with state and federal agencies, which focused on

inter-agency cooperative efforts to prevent the introduction and spread of the Brown Tree Snake from Guam, to Hawai'i and other islands and continents. The meeting brought the issue to a much higher level in the federal government than ever before, and assured continued funding, plus a slight increase.

Also in March 1998, DLNR implemented new rules that prohibit the intra-state movement, release into the wild, and the export of injurious alien species that are pests in Hawai'i. Included on this list are an assortment of birds, frogs, turtles, lizards, clams, and snails, each of which is known or suspected of causing significant ecological or economic damage to our islands' natural resources or agriculture. Each of these species became established in Hawai'i either by accidental introduction or via the illegal release of pets. The revised rules are intended to prevent the spread of these pest species around the state by making it illegal to release them into the wild, transport them to a part of the state where they do not already exist, or export them out of state. Preventing exports is necessary to remove the economic incentive in commercial trade that has encouraged their

*This once-isolated  
"paradise" bears  
the stark burden of  
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biodiversity in the  
world.*

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spread, and that could encourage the illegal introduction of yet additional species.

A multi-year effort by DLNR and the U.S. Department of Agriculture to control the population of Polynesian rats at Green Island in the Kure Atoll appears to have succeeded. Wildlife biologists of the two agencies, who instituted the rat control program in 1993, say follow-up assessments show that for the last four years there has been no sign of rat activity at Green Island. This seems to indicate that rats have apparently been successfully eradicated there. However, scientists warn that continued monitoring and vigilance should be maintained to avoid a resurgence of a remnant population. The success of the rat control program at Kure Atoll shows that resource management agencies in Hawai'i have the technology and expertise to conduct large-scale predator control programs of the type used in New Zealand. It also demonstrates the importance of predator control for native ecosystem management and sustainability. These kinds of control are a top priority management action needed anywhere predators are present.

In January 1998, the Board of Land and Natural Resources

approved a new commercial activity policy for state lands, including parks, forest areas, trails and other natural areas. The new policy is designed to clarify allowable activities on state lands and outline priority uses for the lands. Protection of natural and cultural resources is of highest priority. Next is public use, followed by commercial activity. The policy allows DLNR staff to monitor and regulate the growing number of nature-based tourism activities such as hiking, snorkeling, birding and horseback riding that now take place in our islands, and to ensure that they are carried out in an environmentally responsible manner that will not compromise natural resources.

In 1996-97 DLNR participated in formation of Nā Hoa Mahi'ai, the Hawai'i Forestry and Communities Initiative, a formal partnership of five state and three federal agencies. The partnership is helping to promote commercial forestry that meets community needs. Other steps taken by DOFAW during the biennium to support forestry development include completion of an inventory of 17,950 acres of the state's non-native tree plantations in Waiākea and Hāmākua, completion of a forest management plan for the

12,000 acre Waiākea Timber Management Area, and establishment, in June 1998 of an extension forestry program at the University of Hawai'i at Mānoa, the first ever in the state.

In June 1998, DLNR celebrated the 10th year anniversary of its Nā Ala Hele Hawai'i Statewide Trail and Access Program (NAH), in conjunction with activities highlighting National Trails Day. This biennium Governor Cayetano approved Act 106, which created stable funding for Nā Ala Hele. The funding in Act 106 comes from a percentage of the state fuel tax. Nā Ala Hele was initially created to curb the loss of historic trails, restore public access to specific existing trails, develop new trails, and manage and maintain various existing public trails. Today, Hawai'i's network of close to 300 miles of public hiking trails passes through some of the most beautiful and inspiring natural and cultural sites in the country. Trails and accesses are necessary for agencies such as DLNR to monitor and manage watersheds, some of which host imperiled native species. In addition, certain trails and unpaved roads provide critical access for fire suppression. A significant factor in Nā Ala Hele's success has been the support of trail user groups and





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community volunteers who engage in trail construction and stewardship projects, and participate in the Nā Ala Hele Trail and Access Advisory Councils.

*The following are program descriptions and accomplishments for FYs 1996-97 and 1997-98:*

## WATERSHED PROTECTION &amp; MANAGEMENT PROGRAM

## PROGRAM DESCRIPTION

The goal of the Watershed Protection and Management Program is to ensure viable water yields by protecting and enhancing the condition of Hawai'i's forested watersheds to retard rapid run-off of storm flows, prevent and reduce soil erosion, and improve infiltration rates into Hawai'i's aquifers. This is accomplished through the following objectives:

*Objective 1 – Prevent and suppress forest and range fires on key watersheds that include forest reserves, public hunting areas, and natural area reserves.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Fought 95 fires totaling 370 acres statewide.

- Maintained 175 miles of fire access roads statewide.
- Conducted fire training classes for DOFAW employees, and other state and private agencies.

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Fought 147 fires totaling 15,754 acres statewide.
- Maintained 187 miles of fire access roads statewide.
- Conducted fire training classes for DOFAW employees, and other State and private agencies.

*Objective 2 – Cooperate with established fire control agencies for the protection of other wildlands not within departmental protection areas to the extent needed to provide for public benefits and environmental protection.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97, 1997-98.

- Provided wildland fire protection of 3,360,000 acres statewide.
- Control livestock trespass in impacted watersheds (e.g. forest and natural area reserves).

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Removed 19 wild cattle in the Kula, Ko'olau, West Maui, and Makawao forest reserves, Maui.

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Removed 29 wild cattle in the Kula, Ko'olau, West Maui, and Makawao forest reserves, Maui.

*Objective 3 – Survey and control forest insect and diseases that can damage watershed integrity.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Surveyed 275,060 acres statewide for insect pests, plant diseases, and weeds.
- Initiated a program to control Banana Poka with *Septoria passiflora* fungus in Kula, Maui and portions of West Hawai'i.
- Monitored the effects of the *Septoria passiflora* fungus on Banana Poka in Kōke'e, Kaua'i, and Mauna Kea, Hawai'i.

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Surveyed 248,970 acres statewide for insect pests, plant diseases, and weeds.
- Initiated a program to control the spread of *Miconia* with the *Collectotrichum gloeosporioides* *Miconia* fungus in Hana, Maui and areas around Hilo, Hawai'i.



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*Objective 4 – Plan for and implement the reforestation and management of deteriorating and/or disturbed state watersheds as may be appropriate for watershed value enhancement.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Assisted the Department of Health in removing approximate 131 gallons of assorted toxic paint waste illegally dumped in the Honolulu Watershed Forest Reserve.

*Objective 5 – Produce and distribute tree seedlings for windbreaks, soil erosion control, and watershed enhancement.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Distributed 300,000 windbreak seedlings statewide each year.

*Objective 6 – Promote, encourage, and advocate for incentives to encourage the maintenance and enhancement of key watersheds on private lands.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Cooperated with 18 landowners statewide in managing 2,139 acres of private land under the Forest Stewardship Program.

- Continued to participate in the East Maui Watershed Partnership.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Cooperated with 12 landowners statewide in managing 2,226 acres of private land under the Forest Stewardship Program.
- Continued to participate in the East Maui Watershed Partnership.
- Collaborated with private landowners to establish the West Maui Watershed Partnership.
- Participated in an economic valuation study and dialogue with private landowners towards establishing the Ko'olau Watershed Partnership on O'ahu.

### NATIVE RESOURCES PROTECTION AND MANAGEMENT PROGRAM

PROGRAM DESCRIPTION.

The goal of the Native Resources Protection and Management Program is to protect and enhance the condition of Hawai'i's unique native plant and animal species, and native ecosystems. They bring inherent value to Hawai'i's citizens, and offer productive value to science, education, industry and the cultural enrichment of future generations.

The program seeks to prevent species extinctions whenever possible. This is accomplished through the following objectives:

*Objective 1 – Insure viable populations of native species and increase populations of endangered species by protecting and managing their natural habitats via a system of state-owned and managed sanctuaries, forest and natural area reserves (NAR), and cooperative managed areas.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Maintained 35 plant sanctuaries on various sites on Hawai'i island to protect the Mauna Kea silversword, the Hawaiian vetch, uhiuhi, kauila, koki'o, loulu, 'ōhai and other rare, threatened and endangered species.
- Maintained 24 rare plant sanctuaries on Kaua'i and Maui.
- Maintained 11 plant sanctuaries in O'ahu Natural Area Reserves protecting rare, threatened and endangered species.
- Initiated a multi-year cooperative project with the U.S.F.W.S. and the U.S.G.S./Biological Resources Division to recover the endangered puaiohi including locating



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nests, banding birds and maintaining predator control and active nests.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Successfully pollinated and out-planted Mauna Kea and Mauna Loa silverswords in both planted and wild populations.
- Maintained 24 rare plant sanctuaries on Kaua'i and Maui.
- Maintained 11 sanctuaries in O'ahu Natural Area Reserves protecting rare, threatened and endangered species. A major milestone was the flowering in the wild of the first out-planted *Cyanea superba* in the Pahole NAR.
- Continued to manage habitat in the Hanawā NAR on East Maui for five species of endangered forest birds and other native species by animal, predator, and weed control.
- Continued predator control to remove rats, mongooses, and cats in habitat of native forest birds such as palila, po'ouli and puaiohi on Hawai'i, Kaua'i, and Maui.

*Objective 2 – Conduct an aggressive propagation and re-introduction program for threatened and endangered species through activities such as bird rearing, plant nurseries and out-planting.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Operated 3 rare plant mid-elevation nurseries on Kaua'i, O'ahu and Hawai'i.
- Assisted in the logistics, and participated as a partner with the National Biological Service in field study, and collection of eggs for captive propagation of puaiohi on Kaua'i, and the 'ākohekohe and Maui parrotbill on Maui.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Operated 3 rare plant mid-elevation nurseries on Kaua'i, O'ahu and Hawai'i.
- Constructed and maintained 2 endangered tree snail sanctuaries in the Pahole NAR, O'ahu.
- Assisted in the collection of eggs for captive propagation of the small Kaua'i thrush.
- Located 26 'ākohekohe (crested honey creepers) and 2 Maui parrotbill nests and collected eggs for captive propagation.

- Located the only three known po'ouli in the world, and identified their home ranges on Maui.
- Maintained and serviced nēnē release pens at Hana'ula, West Maui. Sixteen nēnē were released, and two nēnē were fitted with radio transmitters and tracked.

*Objective 3 – Develop, protect and maintain wetland habitat through management and cooperative agreements with other agencies and private organizations.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Conducted semi-annual waterbird surveys in approximately 150 wetland areas statewide.
- Maintained 20 signs, one-half mile of access road, and one mile of fence at Hamakua Marsh, O'ahu.
- Repaired and maintained 3 miles of perimeter fencing, four miles of road and trails, and continued native plant restoration and waterbird monitoring at Kanahā Pond Wildlife Sanctuary, Maui.
- Developed plans for major wetland restoration projects at Kawainui Marsh and Pouhala Marsh, O'ahu.



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*Objective 4 – Control livestock trespass and maintain other animal populations at non-damaging levels for unique native species and ecosystems.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Organized control methods that removed over 40 pigs and 35 goats from the remote sections of Natural Area Reserves, statewide.
- Continued survey and ungulate control activities in palila critical habitat, Hawai'i island.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Organized control methods that removed over 126 pigs and 191 goats and 5 axis deer from reserves.
- Monitored ungulate damage in the Alaka'i Wilderness Preserve, Kaua'i.
- Continued survey and ungulate control activities in palila critical habitat, Hawai'i island.

*Objective 5 – Continue to support efforts for Brown Tree Snake and other alien species control by promoting interagency cooperation, expanding the network of volunteers,*

*and updating training and equipment for effective rapid response capacity.*

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Conducted snake capture training for division employees and other state, federal and private agencies on the islands of O'ahu and Kaua'i.
- Responded to two reported snake sightings on O'ahu, in conjunction with Department of Agriculture officials.
- Participated in interagency efforts to minimize the risk of new alien species being introduced as a result of the Kahului, Maui Airport Expansion.
- Continued participation in the activities of the Coordinating Group on Alien Pest Species (CGAPS) activities to reduce the threat of alien species entering the state.

*Objective 6 – Survey and control noxious plant species that impact native flora and fauna.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Helped to initiate the Maui Invasive Species Committee (MISC) project on Maui.

- Funded the Operation Miconia project to eradicate this invasive plant on Hawai'i and Maui.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Continued directing the Operation Miconia eradication program on Maui.

*Objective 7 – Manage the State Seabird Sanctuary system and other seabird nesting colonies by controlling predators, enhancing nesting habitat, salvaging and rehabilitating grounded seabirds, and enforcing wildlife sanctuary rules.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Conducted annual surveys of all state sanctuaries and other seabird nesting colonies in the County of Honolulu, and Kure Atoll, and estimated population densities.
- Surveyed seabird colonies in Maui County each year, and identified new nesting locations.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Conducted the 19th year of the seabird salvage project on Kaua'i that involved 867 threatened Newell's Shearwaters and 13 endangered dark rumped petrels.



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- Monitored Laysan albatross at Ka'ena Point Natural Area Reserve and Kuaokalā Game Management Area on O'ahu.
- Posted 86 signs at eight State Seabird Sanctuary islands off O'ahu's coastline.

*Objective 8 – Protect native species and their habitats through predator control and other improvement activities such as planting native species and weed control.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97, 1997-98.

- Maintained over 40 miles of existing ungulate control fences in Natural Area Reserves statewide each year.
- Continued predator control and monitoring program at Kure Atoll, Ka'ena Point NAR and Moku'auia Seabird Sanctuary, O'ahu; Kanahā Pond and Hana'ula Wildlife Sanctuary, Maui; and Kapāpala and Pu'u Wa'a Wa'a Sanctuary on Hawai'i.
- Secured new fencing around the 3,800 acre Pu'u Wa'awa'a sanctuary and maintained four exclosure fences around rare plant communities.

*Objective 9 – Conduct surveys of rare and endangered plants and*

*wildlife, and monitor the effects of management activities.*

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Captured and banded 86 'ākohekohe, 24 Maui parrotbill, and one po'ouli, Maui.
- Conducted tree snail surveys in the Ko'olau Mountain Range, O'ahu.
- Conducted a three-day survey in Alaka'i Wilderness Preserve to locate puaiohi (small Kaua'i thrush).
- Conducted surveys for O'ahu 'elepaio in the Ko'olau and Wai'anae mountain ranges.
- Collaborated with Maui Land and Pine, The Nature Conservancy of Hawai'i, U.S.G.S./Biological Resources Division and assisted the U.S. Fish and Wildlife Service in conducting the first forest bird survey of West Maui since 1980.
- Conducted palila and 'oma'o surveys in the Ka'ū Forest Reserve, Hawai'i, with the assistance of U.S.G.S./B.R.D. biologists and volunteers.
- Monitored 62 captive-reared nēnē released at Nualolo 'Āina along the Nā Pali Coast, Kaua'i.
- Surveyed nēnē on Kaua'i, Maui and Hawai'i, and determined that

approximately 1,000 nēnē exist in the wild.

*Objective 10 – Administer the Natural Area Partnership Program (NAPP).*

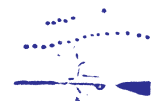
PROGRAM ACCOMPLISHMENTS, FY 1996-97, 1997-98.

- Funded and administered private landowner assistance natural area partnership program, protecting over 25,000 acres of some of the best remaining ecosystems on the islands of Maui, Moloka'i, and Lāna'i.

*Objective 11 – Promote and encourage meaningful applied research that addresses endangered species and natural area management needs and concerns, such as limiting factors, or critical habitat needs for endangered plant species.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97, 1997-98.

- Funded University of Hawai'i plant research at the Lyon Arboretum.
- Funded a research project and assisted in the collection of data for the tree snail sanctuaries and predator control in Pahole NAR, O'ahu.



## DIVISION OF FORESTRY AND WILDLIFE

- Conducted predator control study to determine rodent activity and cost efficient methods for controlling rats, mongoose and cats.
- Investigated the causes of decline of 'elepaio including predation by introduced mammals and avian disease.

### OUTDOOR RECREATION RESOURCES MANAGEMENT AND DEVELOPMENT PROGRAM

#### PROGRAM DESCRIPTION.

The three goals of the Outdoor Recreation Resources Management and Development Program are to: enrich leisure time and capabilities of Hawai'i's residents and visitors by providing opportunities and facilities for multiple outdoor recreational activities such as hiking, hunting, fishing, bicycles, equestrians and motorized off-road recreation; maintain trails and control wildland fires, through the Nā Ala Hele Hawai'i Trail and Access System, and conduct search and rescue, watershed protection, and other natural resource management activities; and to maintain and enhance where possible, a public hunting program of recreational, subsistence, and traditional hunting

methods to provide a source of food and outdoor recreation for the public, and as a means to manage and control introduced game animals. This is accomplished through the following objectives:

*Objective 1 – Maintain and construct roads and trails to allow managed public use of recreational areas.*

#### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Maintained 330 miles of trails and accesses and 250 miles of roads for public use.
- Installed signs at the Hawai'i Tropical Botanical Garden (HTBG) to enable the opening of the Ala Kahakai alignment of the Onomea trails, Hawai'i.
- Assisted Hāmākua hunters and fishermen on Hawai'i island to gain selected access through Kamehameha Schools/Bishop Estate property.
- Completed the Māmane Trail in the Kula Forest Reserve on Maui.
- Designed and constructed a shoreline access walkway and scenic overlook to Maui's highly popular Mokulē'ia Bay, which includes the Honolulu-Mokulē'ia Marine Life Conservation District, in collaboration with Maui

Land and Pineapple Company.

- Completed an additional quarter-mile of the boardwalk through the Alaka'i Swamp on Kaua'i, with volunteer assistance.
- Installed public parking area at both ends of the Lāhainā Pali Trail, with cooperation from Wailuku Agribusiness, Haleakalā Ranch and the Department of Transportation. Interpretive kiosks constructed of stone were placed at both trailhead locations.

#### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Maintained 330 miles of trails and accesses and 250 miles of roads for public use.
- Established an off-road motorized vehicle sub-committee through the O'ahu Advisory Council to investigate potential areas suitable to develop multiple-use trail recreation.
- Installed 2 trailhead boot brushes at the Poamoho and Schofield-Waikāne Trails, O'ahu to reduce the spread of noxious weed species along these environmentally sensitive trails.
- Installed a bicycle rack at a transition point along the Wiliwilinui Trail, O'ahu to accommodate bicycle riders.





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- Reconstructed portions of the Kuamo'o-Nounou Trail Bridge, Kaua'i.
- Removed rubbish on a weekly basis from 30 trail shelters and campground facilities, Kaua'i.

*Objective 2 – Protect ancient and historic trails and accesses.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Preserved portions of the Ala Aupuni (King's Highway) and enhanced shoreline access through involvement with a series of private subdivision developments.
- Collaborated with the State Historic Preservation Division to locate intact sections of the Ala Aupuni and to develop a methodology to accommodate public use.

*Objective 3 – Conduct public hunting seasons, inventory and conduct surveys of game birds and mammals, evaluate hunter harvest for setting seasons and rules, and manage public hunts.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Provided access to 60 different public hunting areas for 10,000 licensed hunters that provided

over 915,000 acres for recreational and subsistence hunting each year. Approximately 25,000 hunter trips were taken for six species of game mammals, and 10,000 hunter trips for 15 species of game birds each year.

*Objective 4 – Construct and maintain forest and wildlife recreational facilities such as trail shelters, arboreta, picnic grounds, viewpoints, signs, bridges and campgrounds.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Maintained and serviced 45 hunter checking stations.
- Maintained and serviced 67 feeding stations and watering units.
- Maintained or replaced 57 signs on public hunting areas statewide.

*Objective 5 – Improve game wildlife populations and habitat by planting food crops, eradicating noxious vegetation, predator control, and restocking game birds where appropriate.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Purchased and released 150 ring-necked pheasants in the Kahakuloa Game Management Area, Maui.

- Mowed and hand-cleared 405 acres of noxious weeds on public hunting areas statewide.
- Planted 15 acres of grasses for game bird nesting cover, statewide.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Released 240 ring-necked and white pheasants on Kaua'i and 150 ring-necked pheasants on Maui.
- Mowed 200 acres to create game bird nesting cover on the island of Hawai'i.

*Objective 6 – Construct and maintain hunter check-in stations; wildlife water units; hunter information, boundary, and safety zone signs; and game feeding sites.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Serviced 129 wildlife watering units and maintained or replaced 268 signs in public hunting areas statewide.
- Maintained 79 miles of fencing in public hunting areas, statewide.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Maintained and made repairs on 77 miles of fencing within public hunting areas, statewide.



## DIVISION OF FORESTRY AND WILDLIFE

*Objective 7 – Advocated for public access by commenting on development plans and forming agreements with private landowners to increase public use of trails and accesses.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Working with development firm Oceanside 1250 to determine the alignment of the Kona Old Government Road.
- Coordinated the planning and the development of the South Maui Heritage Corridor, which includes the transfer of three miles of state-owned shoreline to Maui County and the construction of pathways.
- Participated with the Luana Hills Country Club, City and County of Honolulu, and representatives of Maunawili Estates Subdivision to establish an official route to Maunawili Falls.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Obtained quit-claim deed for an approximately 4-mile section of a trail alignment that traverses Oceanside 1250 property in Kailua-Kona, Hawai'i.

- Continued planning efforts on the South Maui Heritage Corridor, collaborating with the National Fish and Wildlife Service, South Maui Heritage Corridor Committee, Tri-Isle Resources Conservation and Development, Inc., and the Kīhei Canoe Club.
- Identified and mapped previously lost portions of Ala Aupuni (King's Highway) in Kīpahulu and Kahakuloa on Maui.
- Collaborated with the Puna Community Association members to restore and reopen the Puna Old Government Road. Initiated a title search and land survey of the area. Constructed 25 ahu (Hawaiian trail markers) with the assistance of the Boy Scouts of America.

*Objective 8 – Provide additional hunting opportunities by developing new public hunting areas and creating incentive program to encourage more hunting on private lands.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Leased 15,427 acres of land from the Department of Hawaiian Home Lands to provide additional game bird and game

mammal hunting opportunities on the island of Hawai'i.

- Continued to lease 30,000 acres on Lāna'i to provide game bird and game mammal hunting opportunities.

*Objective 9 – Develop responsible mechanisms to encourage and manage commercial uses, such as eco-tourism, in ways that sustain the natural resources and provide benefits to the local community.*

- Through the Nā Ala Hele Advisory Council, established a commercial guidelines subcommittee to encourage commercial operators to establish standards of conduct, professionalism and responsibility.

FOREST PRODUCTS  
DEVELOPMENT PROGRAM

PROGRAM DESCRIPTION.

The goal of the Forest Products Development Program is to broaden the state's economic base by producing, improving, and assisting in the production of high quality forest products to support a sustainable forest industry that maintains and creates jobs while generating rev-



## DIVISION OF FORESTRY AND WILDLIFE

enue for the State of Hawai'i. This is accomplished through the following objectives:

*Objective 1 – Encourage private investment for commercial forest development.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Provided dislocated worker training on basic forest management for 59 individuals.
- Trained eight individuals in basic inventory procedures. Hired six as DOFAW inventory crew in 1997.
- Trained ten adults and youths on nursery procedures such as seedling propagation and improvement.

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Participated in 71 community meetings discussing forestry issues and concerns with island residents.
- Provided a workshop session and information booth on forestry at statewide School-to-Work conference, and State Science Fair.
- Sponsored community workshop/field trip on logging - attended by an estimated 100 people.
- Created a branding concept for Hawai'i's Woods with the

Hawai'i Forestry Industry Association (HFIA), that was similar to Kona Coffee and Hawaiian Macadamia Nuts.

- Developed marketing plan for high value-added products such as furniture, bowls, and crafts with HFIA.
- Co-sponsored annual statewide woodworking show with HFIA, highlighting products made from locally grown woods.
- Conducted consumer survey with HFIA to identify wood species and product preferences.

*Objective 2 – Plan and administer commercial forest management activities on state land, including resource inventory and forest product sale administration.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Formed the Hawai'i Forestry and Communities Initiative, a formal partnership of five state and three federal agencies helping to promote a commercial forestry industry that meets local community needs.
- Completed inventory of 17,950 acres of the state's non-native tree plantations in Waiākea and Hāmākua, Hawai'i island.

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Printed "Best Management Practices" brochures for public distribution.
- Completed forest management plan for the 12,000 acre Waiākea Timber Management Area.
- Tested mainland plywood production run of Eucalyptus and Queensland maple grown at the Waiākea Timber Management Area.
- Inventoried two state forest parcels and one private parcel, totaling 6,470 acres on Kaua'i, Moloka'i and Hawai'i.
- Inventoried 2,280 acres of koa lands at Humu'ula, Hawai'i and provided Department of Hawaiian Home Lands potential options for management.

*Objective 3 – Provide private landowners and processors of forest products with technical forestry assistance.*

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Established an extension forestry program at the University of Hawai'i at Mānoa in June 1998 – the first ever for the state.



## DIVISION OF FORESTRY AND WILDLIFE

- Recruited and hired an experienced, doctoral level tropical forester to manage Hawai'i's extension forestry program.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Co-funded six Hawai'i Forest Industry Association quarterly newsletters.
- Co-sponsored Harvest to Market Symposium in Kona.

*Objective 4 – Administer state and federal cost-sharing programs such as urban forestry and forest stewardship.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97, 1997-98.

- Administered the Kaulunani Urban Forestry program, which granted over \$220,000 for 32 projects statewide, and leveraged over \$1,000,000 of private sector funds and in-kind services.

*Objective 5 – Operate the Central Tree Nursery in Kamuela, Hawai'i, and district nurseries for distribution of high quality tree seedlings for reforestation, special use plantings such as windbreaks and propagation of native plants for out planting.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Distributed over 690,500 seedlings statewide with an emphasis on windbreaks and native plants.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Revised state rules for threatened and endangered plants to allow responsible commercial, educational, and home use.
- Distributed over 3,203,900 "sow and go" seedlings for the commercial forest industry that encouraged the establishment of three private nurseries.

## PUBLIC INFORMATION &amp; STEWARDSHIP PROGRAM

PROGRAM DESCRIPTION.

The goal of the Public Information and Stewardship Program is to develop volunteer and information programs for natural resource management that allow meaningful and productive community involvement in the stewardship of natural resources on public lands. This is accomplished through the following objectives:

*Objective 1 – Develop a website that will give the public easy access to information about the Division of*

*Forestry and Wildlife, ongoing division projects, and basic conservation information.*

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Coordinated construction of the DOFAW website, which includes information about the division; the State's Natural Area Reserves System, including Mt. Ka'ala, Ka'ena Point, and Pahole Natural Area Reserves; and a site for children to learn about native animals of Hawai'i. ([www.state.hi.us/dlnr/dfw](http://www.state.hi.us/dlnr/dfw)).

*Objective 2 – Encourage private citizens to work on natural resource management projects by supporting community volunteer programs.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Worked with Moloka'i Hunting Test Working Group, using public hunters to control feral ungulates in the remote North Shore area of Moloka'i.
- Worked with two focus groups (Kohala Regional Forest Management Group and Puna-Volcano Regional Group) to discuss management options and strategies for their respective areas.



## DIVISION OF FORESTRY AND WILDLIFE

- Coordinated 585 volunteers in performing 2,185 hours of trail improvement work on 37 miles of trails on the island of Maui. Volunteers represented such groups as the Maui Mountain Bike Club, the Sierra Club, the Mauna 'Ala Hiking Club, the Hawaiian Equestrian Trails Association, and the Boy Scouts of America.
  - Regraded severely eroded trail sections, and installed recycled plastic lumber to stabilize the soil and enhance public safety along the Mānana trail, O'ahu, with the assistance of two troops from the Boy Scouts of America.
  - Established a trail stewardship contract with Youth for Environmental Services to restore the heavily used and eroding Mānoa Falls trail on O'ahu.
  - Coordinated volunteer organizations in trail stewardship for the maintenance of the Nounou-Mt. West and the Moalepe/Kuilau trails, Kaua'i.
  - Expanded DLNR's Youth Conservation Corps Program, which introduced youth on O'ahu and Kaua'i to natural resource stewardship projects.
  - Continued volunteer stewardship projects in partnership with the Sierra Club, in the Ka'ala, Ka'ena, and Pahole Natural Area Reserves, O'ahu.
- PROGRAM ACCOMPLISHMENTS, FY 1997-98.
- Repaired and improved the first 2 miles of the Maunawili Trail on O'ahu through a contract with the Sierra Club.
  - Produced an interpretive trail guide for Kīpuka Pu'u Huluhulu, Hawai'i. Coordinated volunteers from the Nature Conservancy's Hoa'Āina Program for youth in the planting of māmane trees generated from seeds collected on site. Hilo High School Greenpeace Program assisted in the removal of alien German ivy in order to allow for the regeneration of native cucumber.
  - Coordinated and supervised 59 volunteers for a total of 950 service hours on various trails and access projects on Kaua'i.
  - Coordinated and supervised 130 individual volunteers (includes support from members of the Maui Mountain Bike Club and the Sierra Club) for a total of 2,207 service hours on various trail and access projects on Maui.
  - Restored a portion of the Hau'ula Loop Trail on O'ahu with assistance from Boy Scouts from Aloha Council.
  - Restored approximately 3/4 of a mile of the Waimano and Service Access Trail on O'ahu, through a series of outings with volunteers from Kūlia I Ka Pono of KS/BE, Boy Scouts from Aloha Council, and the Honolulu Boys and Girls Club.
  - Developed a mountain biking informational pamphlet for general distribution to foster appropriate mountain bicycle use of public trails.
  - Utilized approximately 1,013 volunteers for a total of 4,185 service hours on various trail restoration projects on O'ahu.
  - Maintained the Moalepe Trail on Kaua'i on a quarterly basis (approximately 100 service hours) through a trail stewardship agreement with the Espirit De Corps Riding Academy.
  - Maintained portions of the Nounou-Mt. West Trail on Kaua'i (approximately 80 service hours) through a trail stewardship agreement with the Hyatt Regency Kaua'i.
  - Continued the DLNR Youth Conservation Corps Program, which introduced youth on O'ahu to nat-

## DIVISION OF FORESTRY AND WILDLIFE

ural resource stewardship projects.

- Continued volunteer stewardship projects in partnership with the Sierra Club, on the Ka'ala, Ka'ena, and Pahole Natural Area Reserves.

*Objective 3 – Work with the Hawaiian community to develop appropriate protocols for sustainable traditional and cultural gathering.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Co-sponsored a conference to inform hālau hula of human impacts to the native forest, and the need for responsible harvesting of native plants.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Initiated a pilot program with hālau hula for a stewardship project in O'ahu Natural Area Reserves.

*Objective 4 – Develop information and educational materials on the division's programs such as maps, reports, brochures, teachers' packets, videos, and posters.*

PROGRAM ACCOMPLISHMENTS,  
FY 1996-97.

- Collaborated with the City and County of Honolulu by providing funding, storage and distribution for a hiking safety brochure that provides information on how to hike safely.
- Created the Native Hawaiian Forest Birds traveling photo exhibit, with shows on O'ahu, Kaua'i, and Maui.
- Created coloring book and informational brochure to accompany the forest bird photo show.
- Provided resource background for the 'Ōhi'a Productions play, "Voices of the Rainforest."
- Created a "Hawaiian Native Species" photo exhibit.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Continued to exhibit the traveling forest bird photo exhibit on Moloka'i, Lāna'i, Hawai'i island, and O'ahu.
- Created a bus poster of Hawaiian Humpback whales (in conjunction with the National Marine Humpback Whale Sanctuary).
- Created a Nā Hoa Mahi'ai brochure about the Hawai'i Forestry and Communities Initiative.
- Assisted 'Ōhi'a Productions with the teacher education packet for its "In the Clear Blue Sea" theater production.
- Helped to obtain grant for having the "Voices of the Rainforest" show tour the neighbor islands.
- Supported production of the "Voices of the Rainforest" video for distribution to elementary, secondary, and public libraries statewide.
- Created exhibit about Nā Ala Hele hiking trails on all the main islands.



## HISTORIC PRESERVATION DIVISION

Native Hawaiians arrived by canoe in Hawai‘i nearly 2,000 years ago in several waves of immigration. In the past 200 years, other peoples from Europe, the Americas, Asia and the Pacific have arrived on these island shores. The overlay of cultures has created a wealth of of documented archeological, cultural and historical sites in our state. Each historic site requires assessment and documentation, and decisions need to be made concerning the management of these tangible aspects of Hawai‘i’s heritage. Such activities are the responsibility of the State

**HISTORIC PRESERVATION DIVISION**

Historic Preservation Division (SHPD) of DLNR.

SHPD works to preserve reminders of earlier times which link the past to the present. The division strives to accomplish this goal through maintenance of an inventory of historic properties, the historic preservation review process, economic incentives, support of the five island burial councils, public information and education projects, and preservation planning. All programs and activities are designed to promote the use and maintenance of historic properties for the education, inspiration, pleasure and enrichment of Hawai'i's citizens and visitors.

SHPD's statewide inventory of historic properties contains information on more than 35,000 historic places in Hawai'i. Many of the identified and documented sites are archaeological, but buildings, cultural sites, and ancient Hawaiian burials are also included. Expanding at a rate of approximately 800 entries per year, the inventory of historic properties is consulted daily to determine the effects of land use actions and development proposals on or adjacent to historic properties. This function of the division is known as the Historic Preservation Review Process, and it is the pri-

mary means of mitigating the effects of change on our historic and cultural assets.

Other major division activities include the Burial Sites Program, the Hawai'i Register of Historic Places program, and a publications program.

The Burial Sites Program manages burial sites more than 50 years old. The majority of burial cases handled by the program relate to native Hawaiian skeletal remains, 'iwi, often discovered in the course of excavating unmarked sites for modern development.

Native Hawaiians consider the 'iwi as sacred, and deserving of respectful treatment and reinterment according to cultural protocols. Five island Burial Councils appointed by the Governor address concerns relating to native Hawaiian burial sites. Anyone who wishes to relocate or preserve in place previously identified, unmarked Hawaiian burials must obtain the approval of the appropriate island Burial Council. The division works with other cultural organizations when burial remains related to that specific ethnic group are discovered.

As stewards of such a unique and important part of our islands' culture, it is SHPD's responsibility to

*As stewards of our culture, it is SHPD's responsibility to preserve historic sites while honoring the cultural significance of the past and of the present.*

## HISTORIC PRESERVATION DIVISION



preserve historic sites while honoring the cultural significance of the past and of the present. With preservation and cultural sensitivity equally important, SHPD often establishes partnership with community groups which possess both the expertise and willingness to preserve particular sites.

## HIGHLIGHTS

During the biennium SHPD worked with a number of other divisions within DLNR to assure that Earth's best resources would be sustained beyond today for the benefit of future generations. The division was involved with a number of management "hot spot" areas, and took the lead with regard to the successful acquisition of the Chiefess Keakealaniwahine's Complex on the island of Hawai'i, one of the department's hot spots. The 16.4 acre complex, to be donated to DLNR by First Hawaiian Creditcorp, was the home of Keakealaniwahine, highest ranking chiefess of the Hawai'i island dynasty. The parcel contains impressive ten foot high stone walls, and associated platforms and archaeological deposits.

The division also actively took the lead on the preservation of the

historic properties in the back of Wai'anae valley, O'ahu, another department hot spot. SHPD also played a role in hot spots on: O'ahu – Ka'ena Point, Kāne'ohe Bay, Kawainui Marsh, Diamond Head; Kaua'i – Wailua River, Kōke'e, Nā Pali Coast; Hawai'i – Mauna Kea, Mahai'ula; and Maui – 'Āhihi Kīna'u, and 'Īao valley.

*The following are accomplishments for FY 1996-97 and FY 1997-98:*

FY 1996-97.

- Reviewed and commented on 2,020 development project proposals statewide, providing technical information and advice.
- Responded to 324 cases statewide involving burials (staff respond to reports of inadvertent burials discovered by ground-disturbing construction work or erosion),
- Continued architectural inventory of Hilo to Hāmākua, Hawai'i.
- Commenced archaeological reconnaissance survey of Kahikinui, Maui for the Department of Hawaiian Home Lands.
- Continued archaeological survey of Pearl Harbor fishponds, O'ahu, in cooperation with the Department of Defense.
- Researched and placed on the Hawai'i Register of Historic Places the following historic properties:
  - ◆ **O'ahu**
    - Coxhead Residence
    - Day Residence
    - "Fair Ladies" Residential Complex
    - Hoog Residence
    - Houvenner Residence
    - Kawamura Residence
    - Kay Residence
    - Lufkin Residence
    - Johnny Noble Residence
    - Pond Residence
    - Scott Residence
    - Kaimukī Reservoir
  - ◆ **Hawai'i**
    - Star of the Sea Church, Kalapana
    - A.J. Williamson Residence, Hilo
- Acquired a portion of the Kahalu'u taro lo'i historic district in windward O'ahu.
- Continued rehabilitation of Waialua Courthouse, Hale'iwa, O'ahu.
- Undertook restoration of walls at Kē'ē hula platform, Kaua'i.
- Commenced initial Geographic Information System data entry for island of Hawai'i.

## HISTORIC PRESERVATION DIVISION

- Produced and distributed a video on the Hulihe'e Palace, Kailua-Kona, Hawai'i.
- Continued administration of the Hawai'i Main Street Program which helps revitalize and preserve historic small towns by capitalizing on their historic character.

FY 1997-98.

- Reviewed and commented on 1,911 development project proposals statewide, providing technical information and advice.
- Responded to 267 burial cases statewide.
- Commenced architectural inventory of the work of Claude Stiehl, an architect active in Hawai'i during the 1930s.
- Continued archaeological inventory field work at Kahikinui, Maui for the Department of Hawaiian Home Lands.
- Researched and placed on the Hawai'i Register of Historic Places the following historic properties:

### ◆ O'ahu

Bayer Residence  
Coral House  
Deering Residence  
Erickson-Meyer Residence  
Paxton-Cockburn Residence  
Peterson Residence  
Plantation Manager's House at 'Aiea  
Schieber Residence  
Schofield Barracks Historic District  
Stockade at Schofield Barracks  
Mānoa Chinese Cemetery

### ◆ Hawai'i

Nambu Hotel

### ◆ Maui

Wai'ale Bridge

- Completed rehabilitation of Waialua Courthouse, Hale'iwa, O'ahu.
- Commenced acquisition of Keakealaniwahine's housesite, Kona, Hawai'i.
- Worked with Navy on the return of the battleship U.S.S. Missouri to Pearl Harbor, O'ahu.

The seal of the State of Hawaii is partially visible on the left side of the page. It features a circular design with a central shield, a sunburst at the top, and the year '1959' below it. The shield contains a figure holding a torch and a banner. The outer ring of the seal contains the text 'OFFICE OF THE GOVERNOR' at the top and 'STATE OF HAWAII' at the bottom. The seal is rendered in a light yellow color with a red dotted border.

## LAND DIVISION

In an archipelagic state like Hawai‘i, the life-sustaining value of land has always been important. For more than a thousand years, the native Hawaiian civilization utilized the resources of the land and ocean, applying considerable stewardship to ensure sustained productivity. On steep mountain slopes terraced fields with carefully directed water channels brought forth crops for a growing population. At the seashore, man-made walls enclosed fishponds that provided an assured food source year-round.

The arrival in Hawai‘i by Captain James



## LAND DIVISION

Cook in 1778 and subsequent immigration of foreigners brought enormous political, economic and social changes to Hawai'i. The native land tenure system where the king and chiefs held land for the benefit of all the people gave way to a system of private ownership of land.

Hawai'i was annexed by the United States in 1898, and the Republic of Hawai'i ceded to the U.S. approximately 1.75 million acres of the former government and crown lands of the Kingdom of Hawai'i. For 61 years during annexation, the trust nature of the government and crown lands was recognized by the U.S. With the passage of the Admission Act in 1959 that granted Hawai'i status as the 50th State of the Union, the public land trust was formalized.

Through this act, legal title for the "ceded" lands passed from the U.S. Government to the State of Hawai'i. The transfer also passed on to the State responsibilities to manage the "ceded lands" as a trust for the benefit of the people of Hawai'i. This public trust had five purposes: to support the public schools, to better the conditions of the native Hawaiian people, to develop farm and home ownership, to make pub-

lic improvements, and to provide lands for public use.

As the largest land owner, the State of Hawai'i owns approximately 1.4 million acres of lands throughout the archipelago in addition to all of the beaches and submerged lands in the state. The DLNR Land Division acts as landlord for more than 183,000 acres of total state lands. In sum, its mission is to preserve, protect and enhance the state-owned natural resources for future generations.

### HIGHLIGHTS

In 1997, the reorganization to establish the new Land Division was formally effected. The Land Division incorporates the functions previously assigned to the Division of Land Management, the Office of Conservation and Environmental Affairs, and the Division of Water and Land Development. This reorganization consolidated responsibilities of planning, management and development of state lands and resources. The Division now operates in three major functional areas: land management, planning and technical services, and engineering.

In response to a critical report issued by the Office of the Legisla-

tive Auditor in 1996, the Land Division responded by instituting new procedures and processes to improve records management, file maintenance, and tracking and enforcement of lease requirements. Rental collection procedures were strengthened to more actively pursue delinquencies. As a result, the Land Division reduced rental delinquencies statewide from an average of 20.0% over the last four months of fiscal year 1996 (March - June 1996) to an average of 9.4% over the last four months of fiscal year 1998 (March - June 1998). These delinquencies have been dramatically reduced through consistent application of improved collection procedures, development of tracking systems to ensure timely follow-up, and monthly management monitoring of performance.

The loss of Hawai'i's sandy beaches is a major social, economic, and environmental problem. Studies show that nearly 25%, or 17 miles of sandy beaches on the island of O'ahu have been lost or severely narrowed over the past 70 years due to shoreline armoring. Maui has also experienced similar losses, and to a lesser degree, so have the islands of Kaua'i and Hawai'i. The Coastal Erosion Management Plan



## LAND DIVISION



(COEMAP) was developed by the Land Division's Planning Branch, in partnership with the University of Hawai'i Department of Geology and Geophysics, to address coastal erosion issues statewide. Adopted by the Land Board in November 1997, the plan identifies technical and policy recommendations with respect to shore and beach management/ protection, and has received wide support from coastal communities on O'ahu, as well as from other state, federal and county agencies.

In February 1998, the State of Hawai'i filed a condemnation complaint and deposited \$7.75 million in state funds and \$3.85 million in federal ISTEAF funds to acquire 315 acres of Queen's Beach on the East Honolulu Ka Iwi shoreline from Kamehameha Schools/Bishop Estate.

During the biennium, Land Division's Engineering Branch undertook several significant projects. In 1997, the Engineering branch developed the State's Flood Hazard Mitigation Plan. The plan was formally adopted by the Land Board and subsequently approved by the Federal Emergency Management Agency. This acceptance now allows the state to apply for federal flood mitigation funds promoting safe development in flood plains.

In 1997, the Engineering Branch also began work with the City and County of Honolulu, State Department of Transportation and Federal Highways Administration on an environmental assessment for the dredging of Ala Wai Canal to remove sediment accumulation and to improve hydraulic capacity and water clarity. DLNR will be responsible for the design and construction of the dredging work upon completion of the assessment.

In 1998, the Engineering Branch began work on the federal Flood Mitigation Assistance program to obtain project funds to promote safe development, retrofitting and flood-proofing of structures in flood plains. The branch was successful in obtaining \$225,000 in Federal funds and \$75,000 in matching state funds for the Waimānalo Valley Drainage Master Plan. In the same year, the Engineering Branch also:

- Executed a \$4.5 million inter-governmental agreement with the Honolulu Board of Water Supply to obtain water allocation credits for O'ahu projects by the Department of Transportation, Department of Education, Hawai'i Community Development Authority, Housing Finance Development

*As the largest land owner, the State of Hawai'i owns approximately 1.4 million acres of lands throughout the archipelago in addition to all of the beaches and submerged lands in the state.*



## LAND DIVISION

Corporation and DLNR. This purchase of water credits will allow projects by these agencies to proceed.

- Initiated a maintenance crew for the operations and maintenance of the Kawai Nui Marsh Flood Control Facility due to the transfer of the 830-acre marsh from the City & County of Honolulu, to the State.
- Began work with the Natural Resources Conservation Service to develop an educational video, "Kona Floodways: History, Geology, Planning and Protection" to promote flood awareness.
- Entered an intergovernmental agreement with the Kaua'i Department of Water for joint development of the Hanapēpē Well to provide a new water source for the area's water system.

*The following are program descriptions and accomplishments for FYs 1996-97 and 1997-98:*

### LAND MANAGEMENT

#### PROGRAM DESCRIPTION

The primary objective of the Land Management Branch is to assure the effective and efficient use of public lands for public and private purposes,

in ways that will promote the social, environmental and economic well-being of Hawai'i's people, and fulfill the public land trust obligations.

This is achieved by developing lands according to established guidelines and policies; selling and leasing lands; issuing revocable permits and executive orders; conducting land maintenance activities; and assuring the availability of lands needed for public purposes.

#### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Issued 13 revocable permits and 52 general leases statewide.
- Made 6 cancellations and withdrawals of set asides to governmental agencies.
- Made 9 set asides to government agencies for public purposes, including:
  - ♦ Set aside 10 acres to the Department of Education for Waikele Elementary School and park.
  - ♦ Set aside 5 acres to the State Parks Division for Wailua River State Park.
  - ♦ Set aside 737 acres to the Department of Agriculture for Moloka'i Agricultural Park.
- Collaborated with the Ka'ena Point Task Force to transform the

Mokuleia-Ka'ena Point Coastal Reserve from a dumping ground, into a popular natural area reserve visited daily by fishermen and tourists. Protective rock barriers were installed to prevent entry of four-wheel drive vehicles, and to protect sand dune reserves and water retention reserves. Repairs were made to 1,500 feet of the access road. An entrance gate and entrance rock barriers were installed, as well as a visitor parking area. A sediment basin was constructed to restrict the flow of soil into the ocean during heavy rains.

- Completed Final Environmental Assessment for, and executed land exchange with Campbell Estate to relocate the University of Hawai'i's West O'ahu campus to the foothills of Makakilo.
- Land Division staff, the County of Kaua'i and Navy SEABEES collaborated in the replacement of the Moloa'a Bridge, which had collapsed under the weight of a fully loaded liquid propane tanker truck on June 2, 1997. Working through the bureaucratic maze was not time-sensitive since it was necessary to provide access to residential homes that now did not have it.



## LAND DIVISION

The interaction and cooperation between the three agencies enabled the bridge to be replaced at minimum cost.

- Acquired an access road to Hale O Lono Harbor on Moloka'i to allow public access to the harbor. While County subdivision approval is pending, in the interim, Land Division was able to work out an agreement with the Moloka'i Ranch in which the dirt roadway was paved and opened for public use in March 1997.

### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Issued 11 revocable permits and 10 general leases statewide.
- Made 11 cancellations and withdrawals of set asides to governmental agencies.
- Made 20 set asides to government agencies for public purposes, including:
  - ◆ Set aside 5 acres to the Department of Business, Economic Development and Tourism for the Hilo Foreign Trade Zone.
  - ◆ Set aside 15 acres to the Department of Education for the Mililani Mauka Intermediate School.
  - ◆ Set aside 1.5 acres to the Office of Hawaiian Affairs for Hawaiian

cultural and educational purposes.

- ◆ Set aside 22 acres to the County of Maui for addition to Kanahā Beach Park and roadway parcel.
- ◆ Conveyed university lands to the University of Hawai'i in order to provide the educational institution with additional autonomy to own and manage lands. Land Board approval was received in December 1997 and April 1998 for 24 sites statewide.
- ◆ Sold the Mabel Smyth auditorium facility for \$5 million in June 1998. The Mabel Smyth facility was originally intended to provide sufficient auditorium space during renovations to the State Capitol. Due to the completion of these renovations and the renewed availability of the Capitol auditorium space, the Mabel Smyth facility was underutilized.

## CONSERVATION DISTRICT PLANNING

The Planning and Technical Services Branch administers all conservation district land use activities in the State. The conservation district consists of over two million acres, almost one-half of the total land area of the State of Hawai'i. The conservation district rules make

define allowable uses for these lands. To best protect these precious lands, all proposed development must be reviewed and approved through a Conservation District Use Application (CDUA) process. Only with a CDUA can landowners develop the land within the guidelines set by law.

### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Processed 50 Conservation District Use Permits.
- Processed 25 Site Plan approvals.
- Processed 20 time extensions.
- In conjunction with the Division of Conservation and Resource Enforcement, processed 25 enforcement cases through Hearing Officer/Administrative Penalty System (HOAPS).
- Worked with Kamehameha Schools/Bishop Estate (KS/BE), Gentry, the Board of Water Supply, hiking clubs and community members to develop an agreement with these parties to allow public access, and parking for access to Wiliwilinui Trail in East Honolulu.
- Resolved significant land use issues on the island of Moloka'i with respect to the provision of public shoreline access; public



## LAND DIVISION

access, with trails and signs, has been provided to the West Moloka'i shoreline in the area of Kaupoa House and along the South Shore at Palau'u by Moloka'i Ranch. Vehicular access has been provided to the southeast shore of Moloka'i at Hale O Lono Harbor. Public shoreline access was required by the Land Board pursuant to a 1988 application for a subdivision of Moloka'i Ranch land.

### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Completed Draft Environmental Assessment for Kawai Nui Marsh.
- Continued Conservation District Review Project - Completed draft discussion document for the Conservation District Management Plan. The purpose of this plan is to develop new objectives and criteria for the evaluation of projects in the Conservation District Subzones.
- Began development of a comprehensive plan to bring 180 illegal piers in Kāne'ohe Bay into conformance with land use laws.
- Developed a Geographic Information System (GIS) for data pertaining to lands in the Conservation District.

- Developed an inception report to conduct a site study analysis for the development of a beach restoration project to fulfill contract requirements with the Coastal Zone Management Program for the development of a Shoreline Hazard Mitigation Project.
- Completed Flood Mitigation Application for the Waimānalo Flood Control Study, O'ahu and the Halama Street Beach Nourishment/Restoration Project, Maui.

### ENGINEERING BRANCH

The Engineering Branch administers program areas which benefit the well-being of residents and visitors. It promotes economic development and public welfare by developing water supplies, which in turn, support the projects of other state agencies. This program also promotes partnerships and cost-sharing in the development of water projects to meet the goals of otherwise competing agencies. The Prevention of Natural Disasters Program (which consists of the Flood Control and Prevention Program, and the Dam Safety Program) works to minimize the loss of lives and property dam-

age through the management of flood hazard areas, and regulation of dams and reservoirs. The branch also provides engineering services to other divisions of the department.

### WATER DEVELOPMENT PROGRAM

#### PROGRAM DESCRIPTION.

This program investigates and develops traditional and alternative sources to provide water for state-sponsored projects.

### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Continued implementation and execution of 18 water projects totaling \$19.3 million.
- Completed one well drilling project.
- Continued construction of one well development project.
- Obtained water system allocations for 13 projects by various state agencies.

### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Continued the execution of 18 water projects totaling \$19.3 million.
- Completed construction of one well development project.

## LAND DIVISION

- Obtained water system allocations for 10 projects by various state agencies.

### ENGINEERING SERVICES PROGRAM

#### PROGRAM DESCRIPTION.

This program provides planning, design and construction management services to other divisions and offices within the department, and to other state agencies.

#### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Completed construction of 16 projects totaling \$4.6 million.
- Continued construction of 9 projects totaling \$5.9 million.

#### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Completed construction of 12 projects totaling \$4.82 million.
- Advertised 20 projects for bids totaling \$10.38 million.

### FLOOD CONTROL AND PREVENTION PROGRAM

#### PROGRAM DESCRIPTION

As part of the state's flood control program, the branch administers

control and prevention activities to prevent the loss of life and to protect property. State, federal, or county agencies and private entities work to reduce flood losses by regulating land use through land treatment measures, and installing flood control systems.

#### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Conducted community assessment visits to the four counties.
- Provided information and technical assistance in response to flood complaints and information requests.
- Responded and assisted with stream maintenance activities in state-owned streams.

#### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Conducted community assessment visits to the four counties.
- Provided information and technical assistance in response to flood complaints and information requests.
- Responded and assisted with stream maintenance activities in state-owned streams.

### DAM SAFETY PROGRAM

#### PROGRAM DESCRIPTION

This program administers the inspection and regulation of construction, operation and removal of certain dams in the state.

#### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Continued with the National Dam Inventory update.
- Reviewed and processed four Dam Safety applications.
- Contracted safety inspections for 10 dams statewide.
- Represented the state at the ASDSO National Dam Safety Conference.

#### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Continued with the National Dam Inventory update.
- Reviewed and processed two Dam Safety applications.
- Contracted safety inspections for eight dams statewide.
- Represented the state at the ASDSO National Dam Safety Conference.



## DIVISION OF STATE PARKS

Hawai'i's state parks provide opportunities to experience extraordinary natural and cultural resources, and to enjoy varied, and often unequaled recreational opportunities.

Forested valleys with plunging waterfalls, sandy beaches and seaside cliffs, snow-covered peaks and scenic viewpoints, and unique cultural and historic sites, are made accessible, protected, and interpreted for all, through Hawai'i's State Park system. In Hawai'i's state parks, the resident and visitor alike, can hike, camp, picnic, sunbathe and swim, dive and snorkel, fish, surf and kayak. At many



**DIVISION OF STATE PARKS**

state parks, the visitor will also learn about native Hawaiian culture and history through interpretive signage and programs.

The Division of State Parks is responsible for the operation and maintenance of 55 park sites open to the public on O'ahu, Kaua'i, Maui, Hawai'i and Moloka'i, plus 13 other sites in which State Parks has an interest. These sites cover a grand total of 26,814 acres. State parks range in size from less than one acre to over 6,000 acres, and include wilderness and historical parks, recreation areas and recreation piers, waysides, monuments, and underwater parks. A number of these sites are also designated as National Natural Landmarks and National Historic Landmarks. Most facilities are operated and maintained by State Park employees; however several parks are partially operated by concessionaires who provide lodging, picnic pavilions or boat tours.

While park user fees support the State Park Interpretive Program, limited State financial resources have required, in recent years, that park maintenance focus on park user health and safety. At park sites that have become major tourist destinations, such as Diamond Head State Monument, protection of

resources and maintenance of a quality environment and park experience have become priorities, and continue to be a challenge.

The Hawai'i State Parks mission is to protect and interpret Hawai'i's natural and cultural heritage of statewide, and national significance, and to provide recreational opportunities within park areas. This is accomplished by the three major state park programs: Park Administration; Park Development and Operation; and Park Interpretation.

**HIGHLIGHTS**

An update of the 1979 Diamond Head State Monument master plan was initiated in January 1998, to address increased visitor use and the need for a visitor center, as well as the management of endangered plants, fragile soils, and an occasional wetland in the crater.

In June 1998, the division conducted public hearings on the revision of State Park rules to allow charging fees for camping and parking at state parks, and for access to Diamond Head State Monument, O'ahu. Additionally, public hearings were conducted during this period to create rules for the "Park Acquisition Trust Fund" statute of 1997.

Community-State Parks partnerships continue to provide essential assistance. On the island of Kaua'i, the Nā Pali Coast 'Ohana continued its volunteer effort to improve the Nā Pali Coast State Park and to raise community awareness and involvement by undertaking trail maintenance and reconstruction, removal of noxious weeds and rubbish, and outplanting native plant species. On the island of Hawai'i, the community-based Kekaha Kai State Park Task Force completed its planning work in July 1996, and then took on a new mission, and a new name - "Friends of Mahai'ula at Kekaha Kai State Park." The Friends raised over \$8,000 for the park and undertook two community workdays. Community members collected and hauled more than 10.5 tons of debris from the park, and then painted the old Magoon Estate family home, which is destined to become the park's marine and cultural education center.

Also in 1998, at the Sand Island State Recreation Area, a joint government-union-private partnership, consisting of the Governor's Office, DLNR, Department of Transportation, Department of Accounting and General Services, the Hawai'i AFL-CIO Operating Engineers Local 3



## DIVISION OF STATE PARKS

and Kimura International, Inc., built six Little League baseball fields, at minimal government expense. Materials and labor were donated, and the first tournament held on July 3-5.

The Park Interpretive Program has been expanded with the establishment of a new “ambassador” position at Diamond Head State Monument. More than a million visitors a year visit the extinct volcanic crater, one of Hawai‘i’s most recognized natural resources. The park ambassador position is critical for insuring good management and sustainability of this world-famous attraction. By sharing the natural and cultural history of O‘ahu’s most famous landmark with park visitors, the ambassador will seek to heighten visitor awareness about the fragile nature of the resources in the crater, and encourage visitors to treat the area with respect. Two other ambassadors, one at Kekaha Kai State Park in Kona, Hawai‘i and the other at Nā Pali Coast State Park on Kaua‘i, continue in their efforts to work with local communities and visitors on the conservation, preservation, and protection of the special natural and cultural resources within these wilderness parks.

The Interpretive Program has also expanded into two new areas of program development. One area is the construction of shelters at selected state parks to house interpretive exhibits and displays which will promote visitor awareness and understanding of the resources, the history, and the past environment of the park area. Design for such facilities has been completed for Diamond Head State Monument, O‘ahu and Lapakahi State Historical Park in North Kohala on the island of Hawai‘i.

The other new activity is conducting visitor surveys to better understand visitor needs and interests that will help DLNR develop meaningful interpretive programs in the parks. Surveys will also give feedback on interpretive programs already in place, and indicate helpful changes for greater visitor enjoyment. Visitor surveys have been initiated at Diamond Head State Monument and Nu‘uanu Pali State Wayside on O‘ahu, and there are plans to expand these surveys to other high visitation parks where interpretive devices are being planned.

In February 1998, the state of Hawai‘i began the process to

acquire 315 acres of Queen’s Beach on the East Honolulu Ka Iwi shoreline. With this action, the Ka Iwi coast is now several steps closer to joining Kaua‘i’s Nā Pali Coast, Big Island’s Kekaha Kai, Maui’s Mākena and O‘ahu’s Ka‘ena Point as wilderness areas to be preserved in their natural state, protected from development in perpetuity.

## PARK ADMINISTRATION PROGRAM

### PROGRAM DESCRIPTION.

The Park Administration Program enhances park system effectiveness and efficiency by formulating overall policies and developing long range system goals, directing operations and personnel, and providing administrative and support services. Major activities include: general administration, planning, contract administration, staff support services for State Park projects, project review for impact on outdoor recreation resources and opportunities, State Park reservation system management, collection of park system data and preparation, and adoption and implementation of State Park system rules.



## DIVISION OF STATE PARKS

In addition, the State Recreational Planning Program is administered by the Division. This program coordinates the Federal Land and Water Conservation Fund (LWCF) grant program which benefits state and county parks by funding acquisition, and development of outdoor recreation projects throughout the state of Hawai'i. The program also coordinates the development of a State Comprehensive Outdoor Recreation planning program.

### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Published the State Comprehensive Outdoor Recreation Plan, qualifying the state for continuous receipt of federal grants for outdoor recreation projects under the Land and Water Conservation Fund Act, Public Law 88-758. Through this program, the State of Hawai'i and the four counties have received more than \$30 million in federal grants since inception of the program in 1965.
- Established a State Parks web site to provide information on Hawai'i's state parks to a worldwide audience.

### PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Drafted and held public hearings on rules to allow fees for camping, parking and entry to Diamond Head State Monument.
- Drafted and held public hearings on rules for the "Park Acquisition Trust Fund".
- Drafted revisions to the Department's "First Amendment" rules.
- Initiated a long-term, system-wide park visitor count and survey program to provide better data for park planning and development, repair and maintenance, and daily park operation.

## PARK DEVELOPMENT AND OPERATION PROGRAM

### PROGRAM DESCRIPTION

This program enriches the leisure time of Hawai'i's residents and visitors of all ages, by acquiring park lands, preparing park plans, and developing and managing state parks with heritage and outdoor recreation values throughout the state.

### PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Completed planning for Kekaha Kai State Park with the assistance of the community-based task

force. Hired a consultant to prepare an overall conceptual plan for the park, and a development plan and environmental impact statement for the Mahai'ula section of this 1,642 acre coastal park.

- Completed archaeological reconnaissance survey at Kekaha Kai State Park, Hawai'i.
- Completed conceptual plan for Kealahou Bay State Historical Park, Hawai'i, an historically significant site connected to key people and events in Hawai'i's history.
- Completed construction of a gravity sewer, force main and a sewer pump station for Kōke'e State Park, Kaua'i.
- Developed an exploratory well for the domestic water system for Kōke'e State Park, Kaua'i.
- Completed construction of a 200,000 gallon water tank for Kōke'e State Park, Kaua'i.
- Completed construction of a handicap walkway to Waimea Canyon State Park lookout, Kaua'i.
- Completed construction of a 50,000 gallon water tank for Hāpuna Beach State Recreation Area, Hawai'i.
- Completed construction of addition to Hāpuna Beach State



## DIVISION OF STATE PARKS

Recreation Area park maintenance building, Hawai'i.

- Completed clearing and grubbing of 'Aiea Bay State Recreation Area on the shores of Pearl Harbor, O'ahu.
- Completed installation of guardrail barriers and gates in the Mālaekahana State Recreation Area, Phase I area, O'ahu.
- Completed construction of irrigation system improvements for Sand Island State Recreation Area, O'ahu.
- Completed demolition of deteriorating, unused structures on the outside of Diamond Head Crater, and graded and improved drainage at roads and trails within the Crater with the assistance of the Hawai'i National Guard and a visiting Oregon National Guard contingent.

PROGRAM ACCOMPLISHMENTS,  
FY 1997-98.

- Initiated planning for Diamond Head State Monument, where more than 1 million visitors each year enjoy Diamond Head crater's resources, including summit hikes with rewarding views of Honolulu and O'ahu's southern coastline.
- Initiated acquisition of the land for the proposed 1,265 acre Ka

Iwi Scenic Shoreline, at East Honolulu, O'ahu in cooperation with the Department of the Attorney General and the Department of Transportation.

- Completed the conceptual plan for the Kekaha Kai State Park, a 1,642 acre coastal park rich in natural beauty, cultural resources, coastal and ocean recreation, and the future home of a department marine education and interpretive center in Kona, Hawai'i.
- Completed Kekaha Wai 'Ole O Na Kona, an archival and historical research report with oral history interviews with kūpuna, under the ongoing Kekaha Kai State Park, Hawai'i planning contract.
- Completed the Hāpuna Beach State Recreation Area Expansion Plan, designed to increase the park acreage from 62 acres to 784 acres and include picnic areas with comfort stations, family and organized group camping areas, hiking trails, shoreline paths, parking areas, improved access to Wailea Bay, and potential development of an 18-hole golf course should private investor/developers pursue this option.
- Continued preparation of the development plan and environ-

*In June 1998, the Division conducted public hearings on the revision of State Park rules to allow charging fees for camping and parking at State parks and for access to Diamond Head State Monument.*

## DIVISION OF STATE PARKS

mental impact statement for the Mahai'ula Section of Kekaha Kai State Park, Hawai'i.

- Initiated preparation of a development plan for the Nāpō'opo'o section of the Kealakekua Bay State Historical Park, Hawai'i.
- Completed Shoreline Recreation Study for proposed Kīholo Bay State Park, Hawai'i.
- Completed construction of a roadway, parking lot, comfort station, picnic tables and landscaping improvements for 'Aiea Bay State Recreation Area, a new park located along the Pearl Harbor shoreline, O'ahu.

## PARK INTERPRETIVE PROGRAM

## PROGRAM DESCRIPTION

The 'Āina Ho'omalū, or Park Interpretive Program seeks to heighten awareness and understanding of Hawai'i's unique natural and cultural heritage and to encourage recreational opportunities that promote the management and protection of these resources by visitors to DLNR's state park system.

## PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Designed a new, updated State Parks brochure.

- Initiated contract to ensure that the State Parks reservation system, known as SPRVIS (State Parks Reservation and Visitor Information System) is Year 2000 compliant and ready to accept reservations for dates beyond December 31, 1999.
- Installed interpretive signs at 'Iao Valley State Park, Maui.
- Organized and sponsored the third annual Hawai'i Archaeology Week.
- Restored Pihana Heiau, Haleki'i-Pihana Heiau State Monument, Maui.
- Developed four (4) new curatorship programs: 'Īao Valley State Park and Haleki'i-Pihana Heiau State Monument, Maui and Pu'u O Mahuka Heiau and Kukaniloko Birthstones State Monument, O'ahu.
- Initiated restoration of lo'i and the Huilua Fishpond at Kahana Valley State Park, O'ahu.
- Established Kahana Advisory Committee to assist in further development and expansion of the interpretive program with the 31 lessee families at Kahana Valley State Park, O'ahu.

## PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Installed interpretive signs at Nu'uuanu Pali State Wayside, O'ahu.

- Organized and sponsored Hawai'i Archaeology Week 1998 (4th Annual).
- Organized and sponsored workshop for Curatorship Program held at Kōke'e State Park, Kaua'i.
- Established interpretive park coordinator (ambassador) position at Diamond Head State Monument.
- Installed interpretive signs at Hikina'akalā Heiau, Wailua River State Park, Kaua'i.
- Prepared interim interpretive plan for Diamond Head State Monument, O'ahu.
- Designed interpretive shelters at Diamond Head State Monument, O'ahu and Lapakahi State Historical Park, North Kohala, Hawai'i.
- Designed brochure for Diamond Head State Monument, O'ahu.
- At Kahana Valley State Park, lessee families have completed 16 homes and moved in to their homes; 7 lessee families have partially completed construction of their homes and will move in to their homes in the near future; 5 families have construction materials on site, and 3 families have not yet begun to initiate construction of their homes.

PROJECT	NAME	YEAR ESTABLISHED <b>7</b>	TOTAL ACREAGE	DEVELOPED ACREAGE	RECREATION VISITS (1000) <b>1</b>
<b>EXISTING STATE PARKS:</b>					
<b>HAWAII</b>					
F-35	Akaka Falls State Park	1952	65.4	6.0	664
F-75	Hapuna Beach State Recreation Area	1967	63.6 <b>4</b>	21.5	1146
F-53	Kalōpā State Recreation Area	1967	100.0 <b>3</b>	18.0	114
F-14	Kealahou Bay State Historical Park	1967	219.0	1.8	—
	(Ka'awaloa Section)	(1971)	(145.0)	(—)	(—) <b>9</b>
	(Napō'opo'o Section)	(1967)	(74.0)	(1.8)	(—)
H-87	Kekaha Kai State Park (Kona Coast)	1995	1642.5 <b>14</b>	5.0	— <b>9</b>
H-18	Keolōnāhihi State Historical Park	1980	12.0	—	— <b>10</b>
F-66	Kilauea State Recreation Area	1966	7.3 <b>15</b>	0.5	—
H-31	Kohala Historical Sites State Monument	1978	6.8	3.7	—
	(Kamehameha I Birthsite Section)	(1978)	(0.5)	(0.5)	(—) <b>8</b>
	(Kukuipahu Heiau Section)	(1988)	(3.1)	(—)	(—) <b>10</b>
	(Mo'okini Heiau Section)	(1979)	(3.2)	(3.2)	(—) <b>8</b>
F-13	Lapakahi State Historical Park	1973	262.0	53.3	—
F-34	Lava Tree State Monument	1956	17.1	10.0	115
F-77	MacKenzie State Recreation Area	1955	13.1	6.0	104
F-69	Manukā State Wayside	1952	13.4	8.0	196
F-64	Mauna Kea State Recreation Area	1962	20.5 <b>3</b>	17.5	210
H-47	Old Kona Airport State Recreation Area	1976	103.7 <b>13</b>	20.4	1217
F-58	Wailoa River State Recreation Area	1954	131.9	97.7	589
	(Wailoa Center)	(1968)	(4.0)	(4.0)	(18)
	(Wailoa)	(1954)	(127.9)	(93.7)	(571)
F-33	Wailuku River State Park	1967	16.3 <b>3</b>	3.5	904
	(Boiling Pots Section)	(1967)	(6.0)	(2.0)	(162)
	(Rainbow Falls Section)	(1967)	(10.3)	(1.5)	(742)
<b>MAUI</b>					
F-21	Halekī'i-Pihana Heiau State Monument	1962	10.2	3.5	7
F-32	'Iao Valley State Monument	1961	6.2	5.9	449
H-24	Kanekaula Heiau State Park Reserve	1984	0.7	—	— <b>10</b>
F-59	Kaunahāna State Wayside	1952	7.8	3.5	372
F-73	Makena State Park	1971	165.8	2.0	211
F-67	Polipoli Spring State Recreation Area	1957	10.0 <b>3</b>	2.0	8
F-59	Pua'a Ka'a State Wayside	1954	5.0 <b>3</b>	2.5	349
F-55	Waiānapanapa State Park	1966	125.0 <b>4</b>	18.0	498
F-59	Wailua Valley State Wayside	1952	1.5	0.5	37
<b>MOLOKAI</b>					
F-60	Pala'au State Park	1955	233.7	10.0	36
<b>OAHU</b>					
F-83	'Aiea Bay State Recreation	1981	6.0	2.1	— <b>9</b>
F-37	Diamond Head State Monument	1962	493.4	8.0	1000
F-38	Hanauma Bay State Underwater Park	1969	101.0	—	— <b>8</b>
F-27	He'eia State Park	1977	18.5	8.0	62.0
F-11	'Iolani Palace State Monument	1967	11.0	11.0	74 <b>2</b>
F-72	Ka'ena Point State Park	1978	1462.8 <b>4</b>	7.5	100.0 <b>12</b>
	(Leeward Section)	(1978)	(1152.7)	(7.5)	(100.0) <b>12</b>
	(Windward Section)	(—)	(310.1)	(—)	(—) <b>9</b>

[FOOTNOTES INDICATED IN BOLD RED TYPE]



PROJECT	NAME	YEAR ESTABLISHED	TOTAL ACREAGE	DEVELOPED ACREAGE	RECREATION VISITS (1000)	
<b>OAHU, CONTINUED</b>						
F-57	Kahana Valley State Park	1970	5,256.5	26.0	88.0	
	(Kahana Valley)	(1970)	(5,248.2)	(20.0)	(64)	
	(Kahana Beach)	(1992)	(8.3)	(6.0)	(24)	
F-48	Keaiwa Heiau State Recreation Area	1955	384.5	22.0	291	
F-29	Kukanihiko Birthstones State Monument	1992	5.0	—	—	<b>9</b>
F-40	La'ie Point State Wayside	1992	1.4	—	—	
H-68	Makapu'u Point State Wayside	1987	38.2	1.0	—	<b>9</b>
H-70	Mālaekahana State Recreation Area	1977	110.0	46.5	126	
	(Kahuku Section)	(1983)	(36.3)	(1.5)	(—)	<b>8</b>
	(Kalanai Point Section)	(1977)	(73.7)	(45.0)	(126)	
F-30	Nu'uuanu Pali State Wayside	1964	3.0	3.0	566	<b>3</b>
F-23	Pu'u O Mahuka Heiau State Monument	1962	5.7	3.5	2	
F-51	Pu'u 'Ualaka'a State Wayside	1957	50.0	12.0	58	<b>3</b>
F-15	Royal Mausoleum State Monument	1968	10.0	3.0	115	
	(Kapena Falls Reserve Section)	(1976)	(6.7)	(—)	(—)	<b>9</b>
	(Royal Mausoleum Section)	(1968)	(3.3)	(3.0)	(115)	
H-45	Sacred Falls State Park	1996	1,375.9	10.0	56	
F-70	Sand Island State Recreation Area	1970	140.0	83.0	296	
F-24	Ulu Po Heiau State Monument	1954	1.4	1.2	2	
F-61	Wa'ahila Ridge State Recreation Area	1967	49.9	7.0	91	
F-50	Wahiawa Freshwater State Recreation Area	1978	65.9	5.0	71	
<b>KAUAI</b>						
F-09	Ahukini State Recreation Pier	1978	1.0	0.9	107	
F-74	Hā'ena State Park	1972	65.7	2.0	663	
F-46	Kōke'e State Park	1952	4,345.0	55.0	304	
F-80	Nā Pali Coast State Park	1962	6,175.0	4.0	80	
F-78	Polihale State Park	1967	137.7	10.0	138	<b>4</b>
F-12	Russian Fort Elizabeth State Historical Park	1972	17.3	10.0	75	
F-54	Wailua River State Park	1954	1,093.0	37.4	1,144	
	(Fern Grotto Section)	(1954)	(14.6)	(5.0)	(254)	
	(Kaumuali'i Section)	(1962)	(4.0)	(4.0)	(138)	
	(Hikina'akalā Heiau Section)	(1962)	(5.2)	(4.0)	(—)	
	(Marina Section)	(1962)	(11.4)	(15.4)	(605)	
	(Poliahu Section)	(1962)	(139.6)	(9.0)	(147)	
	(Wailua River Reserve Section)	(1956)	(908.7)	(—)	(—)	
	(Malae Heiau)	(1994)	(9.5)	(—)	(—)	
F-39	Waimea Canyon State Park	1952	1,866.4	10.0	345	
F-82	Waimea State Recreation Pier	1974	2.3	1.3	63	
<b>Total State Parks — 56</b>			<b>26,554.0</b>	<b>710.15</b>		

**[FOOTNOTES INDICATED IN BOLD RED TYPE]**

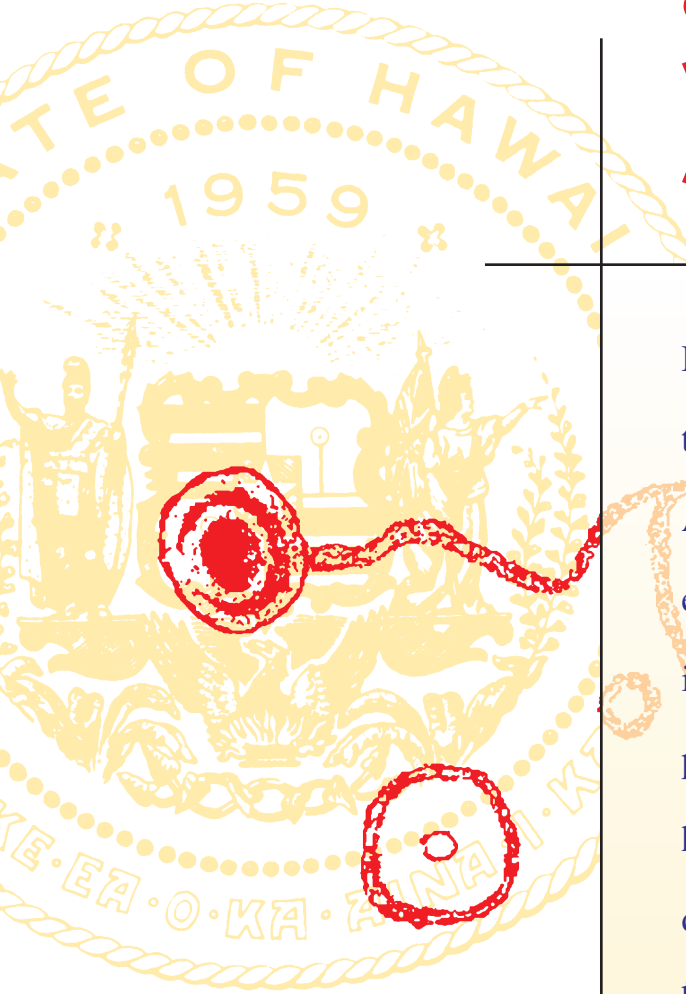
PROJECT	NAME	YEAR ESTABLISHED <b>7</b>	TOTAL ACREAGE	DEVELOPED ACREAGE	RECREATION VISITS (1000) <b>1</b>
<b>OTHER AREAS OF STATE PARK INTEREST:</b>					
<b>HAWAII</b>					
F-58	Wailoa River State Recreation Area Happiness Garden	1978	2.3	2.3	— <b>11</b>
<b>O'AHU</b>					
H-21	DAV Ke'ehi Lagoon Memorial	1981	10.8	10.8	— <b>9</b>
F-51	Hawai'i Nature Center	1981	1.0 <b>5</b>	1.0	39
H-73	Kewalo Basin Park	1981	3.0 <b>5</b>	3.0	— <b>9</b>
H-62	Ke'ehi Lagoon Landfill	1981	10.9 <b>5</b>	—	— <b>10</b>
H-73	Kaka'ako Waterfront Park	1978	30.5 <b>5</b>	30.0	— <b>8</b>
H-92	Kalihi Valley	1992	99.8	—	— <b>9</b>
F-51	Lower Makiki	1979	0.8	0.8	— <b>9</b>
F-18	State Capitol Grounds	1969	10.0 <b>5</b>	10.0	— <b>9</b>
H-29	Waimano Gulch State Park Reserve	1980	35.9	—	— <b>10</b>
F-25	Washington Place	1966	3.1 <b>5</b>	3.1	— <b>10</b>
<b>KAUAI</b>					
F-52	Wahiawa Mauka State Park Reserve	1968	52.3	—	— <b>10</b>
<b>Total Other Areas of State Park Interest – 12</b>			<b>260.4</b>	<b>61.0</b>	
<b>GRAND TOTAL – 68</b>			<b>26,814.4</b>	<b>771.15</b>	

**[FOOTNOTES INDICATED IN BOLD RED TYPE]**

**FOOTNOTES:**

- 1** Visits = (number of vehicles) x (occupants) or the number of actual visits, depending on the facility. One visitor may account for more than one visit.
- 2** Number of visits for 'Iolani Palace Tours only. Does not include grounds.
- 3** Acquired jurisdiction; no definite boundaries yet established; acreage is estimated.
- 4** Acquired jurisdiction of additions; new boundaries not yet established; acreage is estimated.
- 5** Acquired responsibility; acreage is estimate only.
- 6** No current data available — rough estimate only.
- 7** The year State Parks Division acquired area, jurisdiction and/or responsibility for the area.
- 8** Area is opened to the public — no recreation visit counts available (these are areas that are listed in the published Guide to Hawai'i's State Parks).
- 9** Area is used by the public — no recreation visit counts available (these are areas that are listed in the published Guide to Hawai'i's State Parks).
- 10** Area is not open to the public.
- 11** Discontinued recreation visit count at Happiness Garden (Wailoa River State Recreation Area, Hawai'i) as of November, 1984. Area has been under General Lease to a non-profit group from April, 1982.
- 12** Includes recreation visit counts for Keawaula and Makua sections. No separate counts available.
- 13** A 34.8 acre parcel of Old Kona Airport State Recreation Area is leased out to the County of Hawai'i for their Kailua Park.
- 14** Park name changed; Kona Coast S.P. changed to Kekaha Kai S.P. 4/97.
- 15** Kilauea S.R.A. transferred to Division of Forestry and Wildlife 1/2/97.

## COMMISSION ON WATER RESOURCE MANAGEMENT



Drinking water is arguably the most important natural resource in the State of Hawai'i. A reliable supply of water is considered essential for our economic growth and stability. The protection and preservation of this precious resource is directly linked to the health, welfare and quality of life for all residents of the state. However, the state is just beginning on the road to assuring sustainability of our islands' limited water resources.

Hawai'i's drinking water is among the purest in the world. It begins high in the Hawaiian rain forests where heavy vegetation

**COMMISSION ON WATER RESOURCE MANAGEMENT**

cushions the fall of raindrops and allows water to seep into the ground, to be stored behind natural dikes of impermeable rock or to accumulate in perched aquifers above layers of dense lava. Lower down toward sea level, an underground lens of fresh water can be tapped by artesian wells. Hawaiian rain forests are a living purifier, and the watershed they preserve is a priceless legacy which needs to be protected with care for the future generations of Hawai'i.

In modern Hawai'i, a growing population places an increasing demand on stream water and groundwater sources. All life depends upon water — from the goby and the 'opae and the damselfly, to human beings. As DLNR faces the water management challenges of the next century, availability of water is becoming the critical factor in the sustainability and growth of life, on every island, and both in and out of the streams.

Recognizing the importance of managing our state's water resources, the State Water Code (Chapter 174C, Hawai'i Revised Statutes) was enacted by the Legislature in 1987. The responsibility for ensuring the availability and quality of water in the state rests

with the Commission on Water Resource Management (Commission). The Commission is the regulating government agency responsible for administration of Hawai'i's State Water Code, which includes allocation of water in designated water management areas.

In carrying out these duties, the Commission is responsible for setting overall water conservation, quality and use policies; providing for the beneficial and reasonable use of water; protecting and sustaining ground and surface water resources, watersheds, and natural stream environments; establishing criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses; and instituting procedures for regulating and managing all uses of Hawai'i's water resources.

**HIGHLIGHTS****WAIĀHOLE DITCH CONTESTED CASE HEARING**

In January 1995, the Commission ordered a combined contested case hearing on the water use permit applications, petitions to amend the interim instream flow standards, and requests for reservations of water

related to the Waiāhole Ditch system on O'ahu. The evidentiary portion of the Waiāhole Ditch Contested Case Hearing, which began in November 1995, continued to August 21, 1996. In that period there were 52 days of hearings, including four evening sessions. The 25 parties presented written testimony from 161 witnesses, of which 140 testified orally. There were 567 exhibits introduced into evidence. Closing arguments were presented from September 18 to 20, 1996.

On July 15, 1997, the Commission issued a proposed findings of fact, conclusions of law, and proposed decision and order in the case. The decision proposed to establish new interim instream flow standards and supplemental flows to protect windward streams, and proposed to authorize sufficient water to meet the present and future water needs of leeward diversified agriculture. The parties were given the opportunity to file written exceptions to the proposed decision and order. The Commission heard oral arguments on the written exceptions on August 22, 1997.

The Commission issued the final findings of fact, conclusions of law, and decision and order on December 24, 1997. In conjunction with



## COMMISSION ON WATER RESOURCE MANAGEMENT

the decision and order, the Commission established several technical advisory committees to address a number of continuing issues involving windward streams and other Waiāhole -related issues.

### ‘EWA MARINA CONTESTED CASE HEARING

In December 1994, the Commission determined that there was sufficient reason to hold a contested case hearing for the ‘Ewa Marina project on O‘ahu. Parties were determined in February 1996, and the hearings were held by hearing officer Robert Nakata in October and November 1996. Proposed findings of fact, conclusions of law, and decisions and orders were filed by the parties in December 1996. Closing oral arguments were presented in February 1997. The hearing officer distributed his proposed findings of fact, conclusions of law, and decision and order in April 1998. The parties filed exceptions to the proposed decision and order in May 1998. Oral arguments before the Commission were scheduled for July 1998, but the parties waived their oral argument privileges.

### LĀ‘IE CONTESTED CASE HEARING

The Commission, in February 1996, approved holding a contested case hearing on water use permit applications submitted by Hawai‘i Reserves, Inc., Lā‘ie Water Co. Inc., and Polynesian Cultural Center. In April 1996, Commissioners Herbert M. Richards, Jr. and Robert G. Girald were designated as hearing officers to preside over the hearing. A hearing to determine standing was held in early June 1996, and in mid-June 1996, Minute Order Number 1 was issued granting intervenor status to 23 parties.

The contested case hearing was convened on January 14, 1997, and was continued over 12 hearing days, concluding on March 14, 1997. The parties filed their proposed findings of fact, conclusions of law, and proposed decision and order in June 1997. The hearing officers issued their proposed decision and order on January 14, 1998. Written exceptions to the hearing officers’ proposed decision and order were filed by the parties on February 27, 1998. Oral arguments on the written exceptions to the proposed decision and order were heard on October 16, 1998.

### WAIOLA CONTESTED CASE HEARING

On January 25, 1996, the water use, well construction, and pump installation permit applications for 1.25 million gallons per day (mgd) for Waiola O Moloka‘i and Moloka‘i Ranch, Ltd. (Waiola) in the Kamiloloa Aquifer System were accepted by the Commission as complete. On May 21, 1996, Commission staff recommended approval of a water use permit for the proposed Kamiloloa-Waiola Well (Well No. 0759-01) for the reasonable-beneficial use of 0.33 mgd for existing uses and proposed future uses.

On October 3, 1996, the Department of Hawaiian Home Lands (DHHL) filed a timely petition for a contested case hearing on the water use, well construction, and pump installation permit applications for the Kamiloloa-Waiola Well. At its October 23, 1996 meeting, the Commission determined that there was sufficient standing for DHHL and began proceedings for a contested case hearing. On April 15, 1997, Commissioner Richard H. Cox was appointed as hearing officer for the contested case. On April 29, 1997, hearing officer Cox held a hearing

## COMMISSION ON WATER RESOURCE MANAGEMENT



on Moloka'i to determine which of the applicants, who timely applied, in addition to Waiola and DHHL, would be allowed to participate in the contested case hearing. On May 14, 1997, the Commission, upon the recommendation of hearing officer Cox, granted standing to the following: Office of Hawaiian Affairs, County of Maui, four individuals within the Kamiloloa Aquifer System who have some property interest in the land or who lawfully reside on the land, and twelve individuals who claim traditional and customary rights of ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778.

The contested case hearing opened October 27, 1997 in Kaula, Moloka'i at the Moloka'i Civic Center, and continued through that week to October 31, 1997, and continued on November 14 and 21, 1997 for a total of 7 hearing days. On November 21, 1997, all parties presented their closing oral arguments. The hearing officer's proposed findings of fact, conclusions of law, and proposed decision and order was distributed to the parties on August 19, 1998.

## KUKUI CONTESTED

## CASE HEARING

On December 15, 1993, Kukui (Moloka'i), Inc. (KMI) submitted an amended application for existing uses and projected demands at its west-end resort area. On March 14, 1995, the Commission voted to approve the issuance of an interim water use permit for KMI for the continued existing use of 871,420 gallons per day. On April 6, 1995, KMI submitted a motion for reconsideration of the Commission's March 14, 1995 decision.

On June 14, 1995, the Commission voted to deny KMI's motion to reconsider and reaffirmed their March 14, 1995 decision. On May 21, 1996 the Commission denied a submittal recommendation to approve an increased total of 1.045 mgd from Well 17 for existing uses based on updated information. KMI requested a contested case hearing. On April 16, 1997, the Commission found that KMI had standing to request a contested case hearing, directed staff to initiate such a hearing, and delegated to the Chairperson the authority to appoint a hearing officer. On April 24, 1997, Peter Adler was appointed as hearing officer for the case. On June 24, 1998, prehearing conference #1 was held.

*As DLNR faces the water management challenges of the next century, availability of water is becoming the critical factor in the sustainability and growth of life, on every island, and both in and out of the stream.*





## COMMISSION ON WATER RESOURCE MANAGEMENT

The contested case hearing was scheduled to begin in November 1998.

*The following are program descriptions and accomplishments for FYs 1996-1997 and 1997-1998:*

### BASIC DATA COLLECTION AND RESOURCE ASSESSMENT

#### PROGRAM DESCRIPTION

In order for the Commission to make informed decisions and create effective plans, it is important to collect, analyze, and disseminate data regarding climate, groundwater and stream flow. Groundwater computer modeling is used to understand selected aquifers (groundwater storage areas). The cooperative program with the U.S. Geological Survey (USGS) provides basic data and analysis on stream flows, groundwater levels, and water quality. Nearly 200 volunteer rainfall observers and the National Weather Service (NWS) provide rainfall and other climatic data statewide. In addition, water users throughout the state submit information on wells, stream diversions, and water use amounts.

The Commission staff, on a monthly basis, monitors specialized

groundwater networks in critical areas in the state by conducting hydrologic investigations to better understand the occurrence and characteristics of the resource. The Commission's statewide monitoring efforts are essential to its regulation and management of our state's water resources especially with regard to monitoring potential threat of salt-water intrusion from current and future groundwater withdrawals.

#### PROGRAM ACCOMPLISHMENTS, FY 1996-97 AND FY 1997-98 COMBINED.

- Increased monitoring and data collection efforts leading to early recognition of potential aquifer impacts and the successful implementation of proactive steps to protect and sustain Maui's 'Īao Aquifer System, O'ahu's Pearl Harbor and Honolulu Aquifer Sectors, and the 'Ewa Caprock Aquifer, West Hawai'i's aquifer systems, and the entire island of Lāna'i.
- Initiated site selection, planning, and design of four deep monitor wells on the islands of O'ahu, Maui, and Hawai'i. Two of the wells are in the Kailua-Kona region, Hawai'i, one is in Lahaina, Maui, and the fourth is in the Pearl Harbor area, O'ahu.
- Construction of these monitor wells will provide for collection and evaluation of hydrologic and geologic information, including the reaction of the basal and caprock aquifer from groundwater pumpage.
- Developed a new approach towards defining and assessing sustainable yields for the non-potable 'Ewa Caprock Aquifer using chloride limits rather than pumpage limits.
- Continued monthly sampling of chloride levels in water from wells in the 'Ewa caprock aquifer (an aquifer containing brackish groundwater), O'ahu.
- Continued to collect water level data on a quarterly basis from 25 wells located in South Kohala and Kona, Hawai'i island.
- Continued to log 3 deep monitor wells on O'ahu and 1 on Maui, on a quarterly basis. In addition to water sampling at discrete intervals within these monitor wells, the Commission's staff recently began using a new conductivity/temperature sonde (testing device) for continuous bore-hole logging.
- Continued groundwater data collection in the Lahaina region on Maui on a semi-annual basis.



## COMMISSION ON WATER RESOURCE MANAGEMENT

- Continued the use of electronic data loggers in the collection of groundwater data.
- Continued to monitor rainfall, using electronic recording gauges in remote watershed areas, to determine rainfall characteristics and estimate how much water reaches Hawai'i's aquifers.
- Continued to update the rainfall databases.
- Completed the survey of appurtenant water rights; a study to assist the public in establishing an appurtenant water rights claim.
- Continuing a joint study with the USGS and Maui Department of Water Supply of the surface water/ groundwater interaction in the East Maui region.
- Continued the development of a computer groundwater model for Lāhainā, Maui with the USGS.
- Completed a cooperative geomorphic study of the Waiāhole and Waianu streams in windward O'ahu with the USGS.
- Completed the analysis of aquifer test data in Punalu'u, O'ahu.
- Continue to analyze aquifer test data submitted by well owners using computer techniques.
- In conjunction with the USGS, the Commission recently com-

pleted a preliminary re-evaluation of the sustainable yields for the 'Ewa-Kunia and Waipahu-Waiawa Aquifer Systems of the Pearl Harbor Sector Water Management Area using numerical modeling. This effort has led to the early identification of potential long-term impacts to existing wells. Early recognition and mitigation of these impacts will lead to greater optimization of our resources.

- Completed implementation of Geographical Information System (GIS) capability to assess, analyze, and more effectively manage our state's water resources. As part of this enhanced GIS capability, Commission staff have provided drafting, mapping, and other GIS-related services in support of other departmental programs.

### WATER RESOURCE PLANNING

#### PROGRAM DESCRIPTION

The Commission implements and utilizes comprehensive water resources planning in its regulation and management of our state's water resources. The Commission's water resource planning function

plays an important part in sustaining Hawai'i's water resources. The water code sets forth the requirement for development of the Hawai'i Water Plan (HWP) to guide the Commission in executing its general powers, duties, and responsibilities to assure economic development, good municipal services, agricultural stability, and environmental protection.

Through continual updating and refinement, the Hawai'i Water Plan will become the living document for long-range protection, conservation, and management of Hawai'i's water resources. Recognizing the complexities associated with planning, regulation, and management of our water resources, the Commission is working to develop a Statewide Framework for Integrated Resource Planning (IRP). The framework will provide for coordination and guidance in updating and integrating the various components of the Hawai'i Water Plan.

Implementation of an IRP process will facilitate current planning and decision-making processes administered by the state and counties, and will enable agencies to set priorities and develop appropriate strategies to meet the state's growing water demands.



## COMMISSION ON WATER RESOURCE MANAGEMENT

## PROGRAM ACCOMPLISHMENTS, FY 1996-97 AND FY1997-98 COMBINED.

- Continued the updating and refinement of the Hawai'i Water Plan in coordination with the counties.
- Continued partnership with the City and County of Honolulu and the State Department of Health to support the reuse of wastewater effluent in the 'Ewa plain region on O'ahu. Participated in inter-agency planning sessions to develop a Non-Potable Water Master Plan for central O'ahu in cooperation with the City and County of Honolulu and other federal and state agencies.
- Developed a conceptual stream assessment methodology to identify and prioritize high quality streams. The draft Multi-Attribute Prioritization of Streams (MAPS) study will facilitate the Commission's efforts in the designation and management of potential Heritage Streams statewide and in the development of a statewide stream database.
- Conducted statewide public hearings on proposed amendments to HAR Chapter 13-169 (Protection of Instream Uses of Water) to establish a program for designa-

tion and protection of high quality streams and HAR Chapter 13-172 (Hawaiian Water Rights) to establish a framework governing the practice/procedures for protecting water-related rights. Public comments are being evaluated for incorporation, and additional public hearings may be scheduled on the proposed amendments. Adoption of these amendments will enhance program efforts and further clarify the standing qualifications for objections and contested case hearings.

- Continued participation in the Moloka'i and Lāna'i Water Working Groups to discuss and mediate water issues affecting each island. Similar community-based 'round-table' groups on Maui and Hawai'i islands have formed to address water issues on a less formal basis. Commission staff have facilitated both of these efforts by providing technical and resource data to these groups. Agreements reached as a result of the working groups have minimized the potential for contested case hearings on water-related matters, and the 'round-table' groups provide a proactive approach for local water management.

## REGULATION OF WATER RESOURCES

## PROGRAM DESCRIPTION

Through regulation, the Commission strives to maintain sustainability of Hawai'i's water resources. The staff process applications and make recommendations to the Commission for the issuance of well construction, pump installation, stream channel alteration, stream diversion works, and water use permits throughout the state. The State Water Code allows for the Commission to establish administrative control over the withdrawal of groundwater and diversion of surface water in streams and critical water management areas. The State Water Code also protects instream uses including aquatic and stream-based wildlife habitat, recreation, aesthetics, and hydropower.

## PROGRAM ACCOMPLISHMENTS, FY 1996-97 AND FY1997-98 COMBINED.

- In January 1997, the Commission adopted the Hawai'i Well Construction and Pump Installation Standards so that all new wells drilled and well pumps installed in the state are subject to minimum standards for the protection and optimization of the aquifer systems.



## COMMISSION ON WATER RESOURCE MANAGEMENT

- Levied over \$500,000 in fines and/or alternatives to fines for violations of the State Water Code.
- Continued to meet and work with working groups on Maui, Lānaʻi, and Hawaiʻi who are attempting to develop water use and development plans.
- Developed a management plan to restore Hakalaoa Falls in Waipiʻo Valley, Hawaiʻi. As part of the proposed restoration plans, the Commission issued an order to Kamehameha Schools Bishop Estate to remove an illegal diversion, that would restore Hiʻilawe falls by Dec. 1, 1999.
- Developed and implemented the following streamlining procedures:
  - 1) Delegation of well construction and most pump installation permit approvals to the Chairperson of the Commission;
  - 2) Exemption of temporary, small diameter wells constructed to monitor water quality or other types of chemical contaminants;
  - 3) Implementation of a streamlined well permit review process involving state and county agencies;
  - 4) Establishment of a concurrent permit review process for well construction and pump installation permits;
- 5) Adoption of standardized well construction requirements; and
- 6) Preliminary identification of criteria which may be used to facilitate the review and processing of petitions to amend existing interim instream flow standards.
- Established, by declaratory rulings, expedited review for certain permits. These rulings include:
  - 1) Delegation of approval to the Chairperson for Stream Channel Alteration Permits (SCAP) authorizing the installation of stream monitoring gauges which meet certain stream alteration/construction criteria;
  - 2) Delegation of approval to the Chairperson for certain water use permit modifications and requests for SCAP-related time extensions;
  - 3) Defined stream channel areas in flood plains subject to SCAP regulation; and
  - 4) The Commission has also completed discussions with the City and County of Honolulu's Department of Public Works in order to implement an expedited permit review process for SCAP approvals for routine stream maintenance/clearing under certain conditions.
- Continued monitoring of pumpage data and instituted partial and continuing revocation of unused groundwater to make water available for future uses.
- A total of 83 applications for stream channel alteration permits, 300 applications for well construction or pump installation permits, and 161 applications for water use in designated groundwater management areas were reviewed and acted upon by the Commission. All of these permit applications have had to undergo various levels of staff review and field verifications prior to formal issuance of permits by the Commission.

## ENFORCEMENT AND TECHNICAL SUPPORT SERVICES

### PROGRAM DESCRIPTION

The Commission continues to provide technical field and office services in support of other State Water Code programs and activities. This function includes the investigation of water-related complaints and disputes, enforcement of rules and standards, and the monitoring of permitted activities. Emphasis is placed on field verification of reported water uses from groundwater and surface water sources in critical areas of the state.

**COMMISSION ON WATER RESOURCE MANAGEMENT**

PROGRAM ACCOMPLISHMENTS, FY 1996-97 AND 1997-98 COMBINED.

- Completed field inspections to verify registered groundwater sources, declared water uses, and applicants for water use permits in key groundwater management areas on the islands of O‘ahu and Moloka‘i. For those sources verified, the Commission also prepared and issued certificates of water use for existing registered sources and uses on Moloka‘i.
- Developed and implemented a dispute resolution process that has resulted in the resolution of several water-related disputes thereby minimizing the need to enter into contested case proceedings. The Commission continues to refine its dispute resolution process to facilitate outcome of water-related disputes and the reaching of mediated agreements. A total of 27 out of 59 water-related complaints were investigated and acted upon by the Commission staff, the balance of which are still under various stages of review and/or resolution.
- Continued to conduct field inspections to verify registered groundwater sources, declared water uses, and applicants for water use permits. Field work was focused within groundwater management areas on O‘ahu and Moloka‘i.
- Continued to provide technical assistance in monitoring and collecting groundwater data from selected wells statewide.
- Continued to provide drafting, mapping, and GIS services in support of Commission programs.



## AQUACULTURE DEVELOPMENT PROGRAM

Aquaculture in Hawai‘i is at once very old and very modern. The ancestral traditions defining the Hawaiian culture are based on a relationship between man, sea and the land. To Polynesians, the ocean is an extension of the land, a marine garden to be cared for and harvested. Ancient Hawaiians developed a sophisticated system of loko i‘a (fishponds) unique among Polynesian cultures. Nowhere else in the Pacific were such extensive efforts made to construct and cultivate ponds to provide convenient sources of fish to eat. As the population of the Hawaiian Islands increased,





## AQUACULTURE DEVELOPMENT PROGRAM

fishpond technology became increasingly important in supplying the growing food needs.

While Hawai'i has a long tradition of sustained aquaculture in coastal Hawaiian fishponds, commercial aquaculture is a modern business.

Beginning in the 1960s with the growth of the freshwater prawn farms, the Department of Land and Natural Resources has provided leadership and support to this vital industry through the Aquaculture Development Program.

The Aquaculture Development Program (ADP) was established in 1979 with the delivery of the first State Aquaculture Plan to the Hawai'i Legislature. Hawai'i was the first state to do a comprehensive statewide aquaculture plan, and is recognized as a leader in sustainable aquaculture planning and development. More importantly, historically strong and consistent state support of industry has fostered an international reputation for innovative research, leading-edge technology and high-quality commercial products that attract investor interest from Mainland and foreign sources.

The mission of the Aquaculture Development Program (ADP) is to prepare and implement state aquaculture action plans and policies for

the expansion of production and service industries, coordinate statewide activities, and directly assist both public and private sector interests in achieving their aquaculture-related goals, so as to create jobs and diversify the economies of all islands.

The Aquaculture Development Program provides a wide range of essential support services to encourage growth and diversification of the state's aquaculture industry. ADP is a planning, development and problem-solving organization whose goals are to get production and service businesses started and ensure their success. Specific functions include information dissemination, business counseling, locating a suitable aquaculture site, permit assistance, marketing, animal health management and extension services funding.

Hawai'i's industry is very diverse and includes a commercial production sector producing both food and other products, such as specialty chemicals, aquarium species and disease-free seed stock. There is also a services sector which fosters economic benefits from basic and applied research, consulting, training and professional conferences, as well as degree education revenues by the University of Hawai'i. There are now

over 170 businesses around the islands, and in 1997, they were expected to generate around \$37 million in annual sales of products and services. The "bottom line" is, with strong state investment in the future through ADP, together the public and private sectors have "grown" a sustainable aquaculture industry that is expanding, environmentally-sound and supported by a broad cross-section of the community.

## HIGHLIGHTS

During these fiscal years, the Hawai'i industry was characterized by rapid expansion and increased diversification of products. The number of farms increased to 157 with the ADP effort to identify and include in the farms list, everyone growing tropical fish for sale.

Expanding the culture of freshwater and saltwater aquarium species was a major program focus during this biennium — with emphasis on the recommendations in the 1996 Report to the Legislature on the potential of this industry segment. A directory of Hawai'i Aquarium Products was published in 1997, followed by an updated version in 1998. A summit of the leaders of all the organizations involved in the

**AQUACULTURE DEVELOPMENT PROGRAM**

collection and culture of aquarium species was held to discuss areas of possible cooperation. A series of workshops were also run for growers, wholesalers and retailers to cooperatively work with the Department of Agriculture (DOA) on updating the species importation list. Finally, a major international conference is being planned for November 1999, titled "Marine Ornamentals '99: Collection, Culture and Conservation," that will be the first of its kind and feature Hawai'i's research and development efforts.

"Big aquaculture" took a giant leap with the start-up of potentially multi-million dollar companies on several islands. Capital intensive, high-tech farms have begun on Kaua'i (CEATECH) growing shrimp, O'ahu (Mangrove Tropicals) growing marine ornamentals, and Hawai'i (Big Island Abalone, Aquasearch, Coast Seafoods and Taylor Resources and Micro Bio-products) growing abalone, microalgae, oyster seed and high value seaweed. ADP provided a variety of information and assistance to all of these companies.

Hawaiian fishpond restoration on Moloka'i continued to be a priority for the program. ADP, after securing the leases for two state-owned

Hawaiian fishponds on Moloka'i to demonstrate community-based restoration, established a partnership with the Department of Land and Industrial Relations, Office of Community Services, to hire an on-site coordinator and work with the community on restoration efforts. Work began on Honouliwai Fishpond in June 1997 and was completed in May 1998. Work on the second pond, Kahinapōhaku, is underway.

Opportunities for development of open-ocean aquaculture for Hawai'i were also the focus of considerable attention. ADP is part of a group, which includes the University of Hawai'i Sea Grant College Program and the Oceanic Institute, that is planning a demonstration project for open-ocean, cage culture of moi in Hawaiian waters. Staff drafted amendments to Chapter 190D, the Ocean and Submerged Lands Leasing law for submission to the Legislature to make the law more user-friendly for mariculture projects. An international conference was co-sponsored on open-ocean aquaculture in May 1997 on Maui, which brought experts from all over the world to address this subject. At the conference a new national program to designate six national centers for open-ocean mariculture was

*"Big aquaculture" took a giant leap with the start-up of potentially multi-million dollar companies on several islands.*



## AQUACULTURE DEVELOPMENT PROGRAM

announced by the U.S. Department of Commerce, with Hawai'i to be designated the first such center. ADP was a participant in the planning for this new center, which should be followed by significant federal research dollars in the coming years.

*The following are accomplishments for FYs 1996-1997 and 1997-1998:*

### PLANNING AND COORDINATION

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- Organized and staffed two meetings and one subcommittee meeting for the Hawai'i Aquaculture Advisory Council.
- Participated in meetings of 15 boards and committees (e.g., the Center for Tropical and Subtropical Aquaculture; the Natural Energy Laboratory of Hawai'i Authority; University of Hawai'i Sea Grant Advisory Council; Hawai'i Aquaculture Association; Open Ocean Aquaculture II Planning Committee).
- Organized Hot Spot Team and developed plan for Moloka'i fishpond restoration.
- Staffed the Hawai'i Aquaculture Association.

PROGRAM ACCOMPLISHMENTS, FY 1997-98.

- Organized and staffed one meeting of the Hawai'i Aquaculture Advisory Council.
- Continued departmental efforts to work with the Moloka'i community to restore ancient Hawaiian fishponds through preparation and implementation of a Hot Spot plan and organization of a Hot Spot Team, led by ADP. Efforts were recognized by the Hawai'i Chapter of the American Planning Society with an award for best project in environmental preservation.
- Participated in meetings of 12 boards and committees (e.g., Hawai'i Aquaculture Association; Natural Energy Laboratory of Hawai'i Authority; Pacific Regional Aquaculture Center; the Sea Grant Advisory Council; Organizing Committee Marine Ornamental '99).
- Staffed the Hawai'i Aquaculture Association and produced the association newsletter.
- Hosted visits and tours for officials from Thailand, People's Republic of China, Israel, New Zealand, and the Marshall Islands.

### SUPPORT SERVICES AND RESEARCH

PROGRAM ACCOMPLISHMENTS, FY 1996-97.

- On 79 occasions, provided reviews and assistance to various government and non-profit agencies. These activities included responding to requests for information from the congressional delegation and state legislators; reviewing research proposals; reviewing loan proposals; advising on permit problems; and speaking at workshops.
- Participated in 17 events to promote aquaculture products and enhance aquaculture development. These included both the State Farm Fair and the Hawai'i County Fair, the Hotel and Restaurant Expo, Hawai'i Agriculture Day, Sam Choy Poke contest, and the Bishop Museum "Ocean Planet" exhibit.
- Carried out 158 field trips and 360 case submissions, and provided animal health consultation services to producers and research organizations.
- Business development assistance was extended to prospective farmers wishing to raise such species as: marine aquarium ani-

**AQUACULTURE DEVELOPMENT PROGRAM**

mals, Chinese catfish and carp, oysters, live rock, tilapia, marine shrimp, abalone and corals; as well as persons interested in restoring Hawaiian fishponds. More than 53 individuals and groups were counseled, representing a wide range of ventures — from “backyard” projects to multi-million dollar enterprises.

- Provided assistance and/or materials for nine requests from the print, radio, and television media. Stories describing Hawai‘i’s aquaculture industry appeared on KHVH and KHPR radio, television news, and in Pacific Business News, the Honolulu Advertiser, Pearl World and Readers Digest. In addition, staff developed web pages for two farms selling disease-free shrimp, maintained ADP’s own web page, and published 39 technical and popular articles.
- Assisted Hawai‘i’s aquaculture consultants on ten occasions on topics such as pearls, grant development, siting, and Hawaiian fishponds.
- Managed contracts totaling \$145,228 on disease research and management.

**PROGRAM ACCOMPLISHMENTS, FY 1997-98.**

- Continued high-profile marketing campaign for Hawai‘i’s aquaculture products, services and investment opportunities through direct media assistance; publication of 30 articles, newsletters, and promotional pieces; 22 presentations and speeches; and various clearing-house and referral activities.
- Participated in 13 events to promote aquaculture and aquaculture products, including Hawai‘i State Farm Fair, Hotel and Restaurant Expo, Bishop Museum Ocean Day, Made in Hawai‘i Expo, Big Island County Fair, Agriculture Awareness Day, ‘Ewa Limu Festival.
- Carried out 150 field trips, and analyzed 326 case submissions, and provided statewide animal health consultation services to producers and research organizations.
- Provided major expertise and problem-solving assistance to 45 government and non-profit agency requests, and addressed 59 private sector requests for assistance.

- Provided initial and/or follow-up assistance to more than 51 new business development opportunities.
- Provided assistance and/or materials for 12 requests from the print, radio, and television media, including preparation of two press releases.
- Continued, with the University of Hawai‘i’s Sea Grant Program, statewide extension specialist assistance in production management.



## ADMINISTRATIVE SERVICES OFFICE

The Administrative Services Office provides administrative support services, internal management, and comprehensive fiscal services to the Chairperson and Members of the Board of Land and Natural Resources, and to the operating divisions and staff offices of DLNR. Major services include processing the departmental payroll, processing all vendor encumbrances and payments, billing and collecting state land rentals and water licenses, and also collecting or accounting for all other revenues and deposits (except those revenues collected



## ADMINISTRATIVE SERVICES OFFICE

by the Bureau of Conveyances), and preparing financial reports.

This office also coordinates and assists in the preparation and implementation of the departmental operating and capital improvement project budgets, coordinates and provides internal and external audit functions for the department, maintains a centralized system for monitoring federal grant awards and processing reimbursement claims, and coordinates and assists with the electronic data processing and other telecommunications needs of the department. Other responsibilities are departmental records management, risk management, and reorganizations.

The Administrative Services Office also provides specialized liaison services with the Department of Accounting and General Services, the Department of Budget and Finance, the Legislature, and federal agencies.

### HIGHLIGHTS

#### NATIVE HAWAIIAN REHABILITATION FUND

As provided by the State Constitution, 30 percent of the state receipts derived from the leasing of cultivated sugarcane land and from

water licenses was transferred to the Native Hawaiian Rehabilitation Fund. The amounts transferred to the fund during the 1996-97 and the 1997-98 fiscal years were \$241,352 and \$218,625 respectively. The total amount transferred to the fund since the 1978 constitutional amendment was \$12,163,976 as of June 30, 1998.

#### OFFICE OF HAWAIIAN AFFAIRS PUBLIC LAND PROCEEDS FUND

Act 273, Session Laws of Hawai'i 1980, provides that 20 percent of all funds derived from the public land trust described in Section 10-3, Hawai'i Revised Statutes, be transferred to the Office of Hawaiian Affairs (OHA). Funds are transferred on a quarterly basis. The amount transferred to OHA during the 1996-97 fiscal year was \$2,517,298. This includes \$1,630,029 from state land revenues, \$215,972 from State Park concessions, and \$671,297 from Small Boat Harbor revenues. During the 1997-98 fiscal year, the amount held in escrow for OHA was \$1,999,337, which included \$1,589,603 from state land revenues, \$195,803 from State Park concessions, and \$213,931 from Small Boat Harbor revenues. The total transferred to OHA or held in

escrow since the approval of Act 273, Session Laws of Hawai'i 1980, amounted to \$36,279,930.

#### *The following are accomplishments for FY's 1996-97 and 1997-98:*

FY 1996-97.

- Monitored and processed federal grant financial claims with the U.S. Departments of the Interior, Agriculture, Navy and Justice, FEMA and other federal agencies totaling over \$7 million.
- Conducted audits of selected grants-in-aid and federal aid sub-grantees.
- Completed the single financial audit of our department's federal aid programs for FY 1995-96 with no material adverse findings and comments.
- Coordinated and assisted divisions in the submission and implementation of the department's multi-million dollar and multi-funded operating and capital improvement project budgets.
- Accounted for the expenditure of multi-funded operating funds totaling \$45,164,771 and capital improvement project funds totaling \$69,978,371 (\$64.4 million to reimburse the Airport Fund for a Kapolei land purchase).
- Collected net general fund rev-





## ADMINISTRATIVE SERVICES OFFICE

venues of \$5,495,234 (excluding \$8,714,031 collected directly by the Bureau of Conveyances), special fund revenues of \$28,358,379, and \$2,067,381 trust and agency funds.

- Invested around \$21 million of available special and trust funds through the Department of Budget and Finance and earned \$888,776 for our department.
- Continued to provide support for the computerization of these business functions:
  - ◆ Completed the Year 2000 Compliance Financial Report to the Information and Communication Services Division (ICSD) of DAGS.
  - ◆ Continued to design an Internet Web site for DLNR that will inform an international audience about Hawai'i's natural resources, and solicit aid.
  - ◆ Continued to assist divisions with creating maps using the Geographic Information System for the management, operation and maintenance of all state lands and natural resources.
  - ◆ Implemented the on-line Division of Boating and Ocean Recreation Accounts Receivable System on O'ahu, Hawai'i, Kaua'i and Maui, and continued to work on specialized applica-

tions for the Boating Division.

- ◆ Implemented a License and Permit System for the Fiscal Office to monitor and account for sales, to reconcile schedules of collections, and to simplify calculation and disbursement of fees and commissions.
- ◆ Provided Local and Wide Area Network administration for the following divisions and offices: Aquatic Resources, Boating, Chairperson, Commission on Water Resource Management, Fiscal, Land, Personnel and State Parks.
- ◆ Continued to support network connections to the ICSD Wang and IBM mainframe systems that provide access to the following applications: Automated Revenue and Accounting System, On-line Form 5 Information System, State Parks Reservation and Visitor Information System, and the Land Court Automated Title System.

FY 1997-98.

- Monitored and processed federal grant financial claims with the U.S. Departments of the Interior, Agriculture, Navy and Justice, FEMA and other federal agencies totaling around \$9 million.
- Conducted audits of selected grants-in-aid and federal aid

*The amount transferred to the Native Hawaiian Rehabilitation Fund since the 1978 constitutional amendment was \$12,163,976 as of June 30, 1998.*

## ADMINISTRATIVE SERVICES OFFICE

sub-grantees.

- Completed the single financial audit of our department's federal aid programs for FY 1996-97 with no material adverse findings and comments.
- Coordinated and assisted divisions in the submission and implementation of DLNR's multi-million dollar and multi-funded operating and capital improvements project budgets.
- Accounted for the expenditure of multi-funded operating funds totaling \$48,487,099 and capital improvement project funds totaling \$7,243,856.
- Collected net general fund revenues of \$7,737,557 (excluding \$10,556,862 collected directly by the Bureau of Conveyances), special fund revenues of \$31,744,855, and \$6,862,785 trust and agency funds.
- Invested around \$21 million of available special and trust funds through the Department of Budget and Finance and earned \$972,327 for our department.
- Continued to provide support for the computerization of these business functions:
  - ◆ Continued to implement the Year 2000 Compliance Project so that the Local and Wide Area Net-

works, PC hardware and software applications and the embedded systems will be able to function properly.

- ◆ Continued to enhance the Geographic Information System (GIS) for Division of Aquatic Resources, Commission on Water Resources Management, Land Division, State Parks Division and the GIS lab.
- ◆ Implemented the department's Internet Web site that informs an international audience about Hawai'i's natural resources and invites public participation and assistance in resource management issues.
- ◆ Began implementing an Electronic Mail System that will connect the Department to other State agencies to streamline review processes for numerous permit applications, documents, enforcement issues, etc.
- ◆ Continued to provide Local and Wide Area Network administration and expand network connectivity to other divisions.
- ◆ Continued to support network connections to the ICSD Wang and IBM mainframe systems that provide access to the following applications: Automated Revenue and Accounting System, On-line

Form 5 Information System, State Parks Reservation and Visitor Information System, and the Land Court Automated Title System.

- ◆ Assisted the Personnel Office with relocating their network to a new office, and determining the requirements to connect to the statewide Integrated Human Resources Management System (HRMS).



The seal of the State of Hawaii is partially visible on the left side of the page. It features a circular design with the words "STATE OF HAWAII" at the top and "1959" in the center. Below the year is a shield with various symbols, including a star and a torch. The shield is flanked by two figures. At the bottom of the seal, the words "E·A·O·KA·AINA" are visible.

## PERSONNEL OFFICE

The Personnel Office manages the personnel program for the department. The staff provides support services to the Chairperson and to DLNR's operating divisions and staff offices.

Major services include guidance and technical assistance in position classification, employee relations and employee training and development. The Personnel Office also assists the divisions and staff offices in carrying out the collective bargaining contracts and the grievance process. Staff maintain a centralized system for processing, recording,

**PERSONNEL OFFICE**

reporting and filing the personnel transactions and records of all employees. The Personnel Office prepares and makes recommendations for the adoption of personnel policies and procedures within the Department. Finally, the Office works with the division and staff offices in developing and updating their organization plans.

*The following are accomplishments for FYs 1996-97 and 1997-98:*

FY 1996-97.

- Established 28 new positions in the department.
- Processed 4,930 personnel transactions.
- Processed pay increases for employees in Bargaining Units 2,3, 4 and 13, and those under the Excluded Managerial Compensation Plan.
- Filled 96 vacant positions.
- Updated departmental organization charts.

FY 1997 - 98.

- Established 67 new positions.
- Processed 3,250 personnel transactions.
- Filled 109 vacant positions.
- Updated departmental organization charts.



<b>ACCESSIONS</b>		<b>500</b>	<b>OTHER PERSONNEL ACTIONS</b>	<b>4066</b>
New Hires	Probational	33	Promotion	0
	Inter-Agency Transfer	4	Voluntary Demotion	0
	Inter-Agency Appointment	10	Demotion (Physical Disability)	0
	Inter-Agency Promotion	27	Conversion to Probational Appointment	1
	Inter-Agency Demotion (Voluntary)	3	Conversion to Permanent Appointment	81
New Hires	Limited Term Appointment	1	Conversion to Temporary Appointment Outside of List	0
	Temporary Appointment Outside of List	16	Conversion to Limited Term Appointment	0
	Emergency	349	Conversion to Provisional Appointment	0
	Provisional	2	Reallocation	40
	Exempt	55	Repricing	61
			Change in Title	4
			Limited Term Promotion	2
			Return to Former or Similar Position	1
			Intra-Agency Transfer	27
			Intra-Agency Appointment	5
			Temporary Assignment	677
			Extension - Limited Term Appointment	11
			Extension - Exempt Appointment	71
			Extension - Probational Appointment	1
			Extension - Temporary Appointment Outside of List	18
			Extension - Temporary Reallocation	0
			Extension - Emergency Appointment	0
			Leave-Without-Pay (Child Care)	1
			Leave-Without-Pay (Industrial Injury)	37
			Leave-Without-Pay (Others)	305
			Authorized Leave-Without-Compensation	1
			Extension - Leave-Without-Pay	52
			Return to Duty	83
			Unauthorized Absence	5
			Suspension	6
			Extension - Provisional Appt.	2
			Return from Leave and Transfer	0
			Name Change	6
			Change in Record - Bargaining Unit	3
			Change in Full-Time Equivalent Percentage	3
			Change to New Salary Schedule	620
			Pay Adjustment	216
			Employment & Pay Rate Continued	64
			Pay Adjustment While on Leave-Without-Pay	1
			Hazard Pay Differential	95
			Expiration - Hazard Pay Differential	11
			Correction	1,458
			Cancellation	154
			Change in Retirement Code	0
			Pay Differential - Shortage	0
			Pay Retention Differential	0
			Est. Existing Employee	0
			Change in SSN	2
			Ext LWOC	0
			Step Movement	151
			Strike	0
<b>SEPARATIONS</b>		<b>76</b>		
Resignation & Transfer (Permanent Employees)		21		
Resignation & Termination (Temporary Employees)		38		
Dismissal/Termination		1		
Retirement		13		
Termination (Death)		3		

<b>ACCESSIONS</b>		<b>664</b>	<b>OTHER PERSONNEL ACTIONS</b>	<b>2081</b>
New Hires	Probational	39	Promotion	0
	Inter-Agency Transfer	16	Voluntary Demotion	0
	Inter-Agency Appointment	12	Demotion (Physical Disability)	0
	Inter-Agency Promotion	32	Conversion to Probational Appointment	0
	Inter-Agency Demotion (Voluntary)	3	Conversion to Permanent Appointment	32
	Limited Term Appointment	6	Conversion to Temporary Appointment Outside of List	0
	Temporary Appointment Outside of List	1	Conversion to Limited Term Appointment	0
	Emergency	448	Conversion to Provisional Appointment	0
	Provisional	1	Reallocation	31
	Exempt	106	Repricing	1
			Change in Title	7
			Limited Term Promotion	0
			Return to Former or Similar Position	4
			Intra-Agency Transfer	10
			Intra-Agency Appointment	7
			Temporary Assignment	620
			Extension - Limited Term Appointment	7
			Extension - Exempt Appointment	34
			Extension - Probational Appointment	0
			Extension - Temporary Appointment Outside of List	11
			Extension - Temporary Reallocation	0
			Extension - Emergency Appointment	0
			Leave-Without-Pay (Child Care)	2
			Leave-Without-Pay (Industrial Injury)	25
			Leave-Without-Pay (Others)	362
			Authorized Leave-Without-Compensation	0
			Extension - Leave-Without-Pay	80
			Return to Duty	52
			Unauthorized Absence	5
			Suspension	5
			Extension - Provisional Appt.	0
			Return from Leave and Transfer	0
			Name Change	9
			Change in Record - Bargaining Unit	0
			Change in Full-Time Equivalent Percentage	6
			Change to New Salary Schedule	18
			Pay Adjustment	23
			Employment & Pay Rate Continued	0
			Pay Adjustment While on Leave-Without-Pay	0
			Hazard Pay	239
			Correction	201
			Cancellation	153
			Change in Retirement Code	0
			Pay Differential - Shortage	0
			Pay Retention Differential	0
			Est. Existing Employee	0
			Change in SSN	2
			Ext LWOC	5
			Step Movement	4
			Expiration of Reallocation	4
			Shredding Step Adjustment	16
			Intradepartmental Trans-Adm Purposes	106
<b>SEPARATIONS</b>		<b>85</b>		
Resignation & Transfer (Permanent Employees)		21		
Resignation & Termination (Temporary Employees)		51		
Dismissal/Termination		3		
Retirement		10		
Termination (Death)		0		
Termination - RIF		0		



**CREDITS**

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**DLNR**